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A CONCEPTUAL APPLICATION OF PLANNING, PROGRAMMING, AND BUDGETING IN THE FAIRFAX COUNTY SCHOOL SYSTEM

by Louis K. Bruyneel

June, 1967

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A thesis submitted to the Faculty of [illegible]

[illegible]

Thesis directed by

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A CONCEPTUAL APPLICATION OF PLANNING, PROGRAMMING, AND BUDGETING IN THE FAIRFAX COUNTY SCHOOL SYSTEM

by

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A thesis submitted to the Faculty of the School of Government
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CHAPTER I

BACKGROUND

The Problem

The "great society" approach to governmental planning and budgeting is concerned with both the adequacy of personal income and the effective and efficient utilization of the tax dollar. This is an era of changing philosophies in the administration of the public and private sectors of our economy. We recognize a need to obtain maximum marginal satisfaction for each incremental dollar of our income. This dichotomy of man and government utilizing a monetary unit in the most satisfactory way is the basis of financial management.

One must begin at some point to analyze the expression and fulfillment of needs to arrive at an understanding of the economic process. Income is taxed first at the local level to derive revenue for municipal and county governments. State and Federal taxation, in that order, provide further revenue to regional and national interests. Each of these four tax-levying bodies translates funds into various beneficial services for the population. Educational programs constitute one of the services to which all levels of government provide monetary support.

A study of the administration of a county educational system enables a partial examination of Federal, state, and local facets of governmental finance.

Fairfax County, Virginia, provides an education to approximately 102,000 children living within a 400-square-mile area. County funds support 69 per cent of school expenditures, while the state and Federal governments contribute 20 per cent and 11 per cent, respectively.[1] Urban development has increased funding requirements considerably since 1950. The growth of student enrollment in the public school system of this county is shown in Table 1.

The table shows that the county school enrollment growth rate has ranged from 9 per cent to 21 per cent annually, with an average of 10 per cent for the last three years. Should the growth rate continue to average 10 per cent per year, there would, by the fall of 1970, be a pupil population in the county of approximately 143,000. The increases are creating problems, such as an immediate requirement for additional facilities, additional transportation, and an increased demand for qualified instructional personnel. As the student enrollment rises, the administrative workload increases proportionately. The situation creates greater financial burdens in an era of higher wages and salaries and increasing material costs. On this subject Jesse Burkhead says:

> At present, the weakest point in the administration of public schools is the lack of long-range, comprehensive, and participative planning. The little planning that takes place is short-range, segmental, or nonparticipative. Few schools prepare a long-range

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[1] Fairfax County (Va.) Public Schools, Superintendent's School Budget for 1966-67, January 14, 1966, pp. 6-8.

TABLE 1

GROWTH IN ENROLLMENT IN FAIRFAX COUNTY PUBLIC SCHOOLS

Year	Pupil Membership	Percentage Increase
1950 - 51	16,164	---
1951 - 52	18,171	12%
1952 - 53	20,644	14
1953 - 54	24,929	21
1954 - 55	28,006	12
1955 - 56	33,555	20
1956 - 57	38,433	15
1957 - 58	43,051	12
1958 - 59	48,150	12
1959 - 60	53,825	12
1960 - 61	59,983	11
1961 - 62	65,960	10
1962 - 63	72,827	10
1963 - 64	81,040	11
1964 - 65	88,512	11.8
1965 - 66	95,010	7.3
1966 - 67	102,200*	7.6*

* - Denotes estimated figure based on trend and county population.

Source: Fairfax County School Board, Information for Citizens and Voters of Fairfax County, March, 1965.

> budget estimate, a practice long-since developed by every successful large business. In the budget projections that are prepared, the emphasis is too often placed on the funds to be obtained rather than on the educational services to be provided.[1]

Since the Federal Government underwrites the Fairfax County school budget by approximately 11 per cent, special reports and commensurate accounting are required to maintain a basis for continued subsidization. Federal, state, and local funds are commingled for a program; thus, the problem is to provide adequate measurements for each segment. This implies a physical, as well as a financial, analysis. There is a possibility that the Federal subsidy will decrease considerably within the next five years. A study made by W. Z. Hirsch contains this statement:

> Education expenditures are incurred by more than 40 agencies of the Federal government. In addition, 50 state governments, more than 30,000 school districts, and thousands of private institutions raise funds for education in the United States. The Federal government is the junior partner, although its education budget (including research in educational institutions and research centers) has increased from \$2.8 billion, or 10 per cent, in fiscal 1960 to \$6.4 billion, or 16 per cent, in 1965. . . . In fiscal 1965, about 21 per cent of Federal education funds were allocated to finance primary and secondary education. . . .
>
> Among the questions which come to mind are these: Should the Federal government spend only \$1.4 billion on primary and secondary education? The relative importance of this level has steadily declined from about 30 per cent of Federal education funds in fiscal 1960 to about 21 per cent today.[2]

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[1] Jesse Burkhead, Public School Finance - Economics and Politics (Syracuse: Syracuse University Press, 1964), p. 37.

[2] W. Z. Hirsch, Toward Federal Program Budgeting (Santa Monica: The RAND Corporation, February, 1966), pp. 18-19.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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[1] [illegible]

[2] [illegible]

Although the amount of Federal support in the future will not change measurably, the increasing aggregate of the annual school budget will be subsidized by a lower percentage ratio of Federal to state and local support.[1] The implication here is that school systems will have to rely increasingly upon state and local support of their programs. The underlying conditions of this premise are (1) that a program of tighter budgets and increased fiscal controls will be necessary and (2) that a new look at the local tax dollar apportionment to schools is imminent. As the local school administration must provide for this contingency in future plans, a superior method of (1) effectiveness planning, (2) functional program delineation, and (3) analytical budgeting of current and future revenue and expenditures will be required. School systems predominantly measure effectiveness by a cost-per-pupil rationale. As a guide, some systems utilize the performance of past years and pupil enrollment and compare them with current student population for a one-year budget.

The purpose of this research is to answer these questions: Can a Planning, Programming, and Budgeting (PPB) system provide an objective[2] measurement of the educational process in Fairfax County schools? Can a PPB system, on the order of that implemented by the Department of Defense

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[1] Gerhard Colm and Peter Wagner, Federal Budget Projections (Washington: The Brookings Institution, March, 1966), p. 115.

[2] Objective, as used here, means belonging to the sensible world and being intersubjectively observable or verifiable, especially by scientific and analytical methods.

(DOD), provide a conceptual scheme of planning and control that can satisfy the school system's present and future requirements? If labor and materials are the resource inputs into the overall educational system, what are the resultant outputs?

Assumptions and Limitations

For the purpose of this research, developments in the school administration since the submission of the last school budget[1] must be disregarded, for the reason that the County Board of Supervisors has curtailed funds and proposed specific salary changes which would have to be analyzed sufficiently to permit reincorporation into the planning. The Board of Education will be required to evaluate the impact of these changes upon the proposed programs and make alternative plans.

In this study, the proposed Resource Management Systems (RMS), presently scheduled for integration with DOD's PPB system on July 1, 1967, will not be a part of the analysis except where it has become assimilated into the PPB process. Changes are continually being made to RMS which have far-reaching effects on the basic program structure as well as on planning and budgeting procedures.

The application of PPB to the Fairfax County school, in the conceptual sense, may appear to be unwieldy from the standpoint of some

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[1] Fairfax County Public Schools, Superintendent's Proposed School Budget for 1967-68, January 12, 1967, pp. 1-119. (Hereafter cited without reference to author.)

special functions that may not fit well into any specific program without a refinement of operational procedures. No functional changes in organization will be implemented in this analysis because individual capabilities for adequate performance can be considered by the administration only after PPB has been applied and tested as the prime budgeting procedure. The use of PPB will, hopefully, point out any problem areas after a reasonable trial period.

In seeking to apply PPB to the Fairfax County School System, there are certain factors affecting the application of this concept that must be taken into consideration. These include the political atmosphere and economic standards of the county and its constituent communities. Only the economic aspect will be discussed in this paper in subsequent chapters.

Organization of the Study

PPB in the Department of Defense is discussed in Chapter II. The analysis of "effectiveness planning"[1] under the alternative strategies and varying input/output relationships, comprehensive program structuring, and the performance-program budget-making procedures is presented as an example of PPB in action.

Chapter III outlines the present planning and budgeting methods employed by the Fairfax County School System. The budget presentation and its relationship to the organizational structure and future planning

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[1] Hirsch, op. cit., p. 2.

provides a base for making refinements in the budgeting format to permit the implementation of the PPB system. A conceptual framework of a PPB system for education is formulated in Chapter IV and integrated with the present planning and budgeting procedures.

The final chapter discusses the merits and disadvantages of PPB as applied to the Fairfax County School System. An analysis of the effectiveness of measurements of inputs and outputs is made to test the hypothesis that a PPB system, properly implemented by the Fairfax County School Administration, will provide a superior program structure and critical analysis criteria.

The information necessary to conduct this research was gathered from observations and studies of the local school system in Fairfax County and from interviews with supervisory and administrative personnel. Studies of several prominent authors on program and performance budgeting, the DOD PPB system, cost analysis, and school finance, as well as professional journals, have been used as secondary sources.

CHAPTER II

PPB IN THE DOD MANAGERIAL SYSTEM

The Evolution

The management changes that have evolved in the defense structure have significantly contributed to its success. Both Hoover Commissions recommended that working capital funds be established in the Department of Defense and that the defense budget be presented so as to emphasize accomplishments instead of services and things purchased. The performance budget concept is reflected in the fact that each Federal appropriation for defense is expressed in terms of programs and activities, with a parallel classification of the total appropriation by object class. The end-product, service, or output, as well as the input, is the rationale of the DOD appropriation structure. Under this concept, Congressional committees consider DOD appropriations in 40 accounts grouped under five major categories.

The second Hoover Commission on "Organization of the Executive Branch of the Government" reported that DOD was unable to gauge its performance because of the over-detailed and cumbersome allotment system. The Commission recommended (1) that the Executive Budget continue, on the basis of activities, functions, and projects, as a "program budget" and (2) that cost-based operating budgets be used for agency fund allocations supplemented

by periodic performance reports for management purposes.[1] It also recommended that all government accounts be kept on the accrual basis. Thus, the first Comptroller of the DOD was provided with the conceptual scheme for his "performance-type budget."

The Hitch Era

During the years 1961 through 1965, Charles J. Hitch, then Comptroller of the DOD, developed the Five-Year Defense Program (FYDP), which was an orientation of planning toward programs as well as resources. He also fostered the use of cost-effectiveness techniques to compare alternative plans needed to identify objectives and determine the resources required to meet these goals.

These developments have improved advanced planning techniques as well as varied management and accounting systems, but they have not directly affected the operating management of resources. This will be the task of the new Resource Management Systems (RMS).[2]

The General Concept

Each service within the defense structure carries out a long-range strategic study, which is part of the planning phase of a program, to

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[1] Herbert Anderson, Captain, U.S.N., "CNO's Role in PPBS," Lecture given before the Financial Management Students at The George Washington University, November 30, 1966. (Hereafter cited as Anderson lecture.)

[2] U.S. Department of Defense, A Primer on Project PRIME, November, 1966, p. 1. (Hereafter cited without reference to author.)

determine force- and support-level objectives. The plan specifies future actions to accomplish mission requirements.[1] This initial phase is keyed to an eleven-year time frame. Subsequently, the Secretary of Defense promulgates the approved force levels and personnel strengths necessary to implement the FYDP or mid-range planning objectives. These are then quantified in terms of estimated assets applied to the "threat" assessment and alternative force levels.

It is the function of the Joint Chiefs of Staff (JCS) to articulate the threat concurrently to the Office of the Secretary of Defense (OSD) and to the services. OSD evaluates the threat assessment and issues a logistics planning document indicating approved force levels and manning strengths. These parameters provide each service with the necessary guidance to effect a Long-Range Strategic Study (LRSS) which, when documented, furthers long-range planning. The LRSS appraises the anticipated strategic environment of the future, ten to twenty years, taking into consideration the scientific and technological factors likely to affect prosecuted warfare in this period. The LRSS is not unduly constrained by budget or program considerations but considers scientific and technological feasibility and probable availability of resources, thus providing a broad frame of reference for mid-range planning. The guidance of this analysis defines the basis upon which the Mid-Range Objectives document is prepared.[2]

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[1] Anderson lecture.

[2] U.S. Department of the Navy, Navy Logistic Systems School, Financial Management in the Navy, June, 1966, p. 3-9. (Hereafter cited without reference to author.)

The period between the final year of the FYDP and the first year of the LRSS documents is researched in a Mid-Range Study document. It develops a proposed strategic concept, appraisal, military objectives, and the logistics concept. The character and composition of forces to accomplish the overall missions and developed tasks are the outputs of the Mid-Range Study document. These outputs become the inputs to the DOD Joint Strategic Objective Plan (JSOP). The JSOP in conjunction with the LRSS forms the framework for strategic guidance upon which the Mid-Range Objectives (MRO) document is developed. National policies and objectives are interpolated with the MRO to indicate weapons capabilities to be developed, warfare techniques to be introduced, and strategic applications to be sought.[1]

The costs of each mission or program are partially determined by a consideration of the FYDP as it is quantified by each service. Established criteria of the FYDP are: minimizing resultant cost over program life; "discounting the streams of cost or gain";[2] and ranking alternate proposals necessary to the decision-making or planning phase. Further evaluation of the involved programs cannot be attempted until these criteria are used to build rational models in order to validate the results and conclusions reached in the FYDP. Other considerations that must be evaluated within the model are the availability of resources and manpower at programmed cost and the

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[1] Ibid., p. 3-10.

[2] Charles J. Hitch and Roland N. McKean, The Economics of Defense in the Nuclear Age (Cambridge: Harvard University Press, 1960), p. 139.

strategic uncertainty due to mission changes. These considerations are not quantifiable, yet they are determinants in the quality of decision making.

Alternative force levels indicate manpower and cost considerations. The cost elements derived from the determination of objectives and the planning phase of the system are broken into major program elements of two types: (1)"those which are mission oriented and directly related to the defense posture on which independent decisions can be made" and (2) "servic or support programs showing activities whose size and resources are essentially dependent upon the size and position of the independent activities."[1] E. Reece Harrill has written on this subject as follows:

> In planning, programming, and budgeting, the look is not always at the future. A look at past operations and the present status is necessary to see what happened, if programs are on schedule, and to see if the course has to change to reach the objectives. This can be done with a good system of accounting and reporting, which includes quantitative data. . . . Many systems of performance on program budgets have failed because there was no effective means for measuring results.[2]

The Program

According to Henry S. Rowen of the Bureau of the Budget, the key elements of an output-oriented information system are:

1. Authoritative, quantified program descriptions.
2. "Output" oriented categories.
3. Physical performance measures.
4. "Inputs" or costs keyed to outputs.

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[1] A Primer on Project PRIME, pp. 30-31.

[2] E. Reece Harrill, "Planning - Programming - Budgeting in Government," Budgeting, July-August, 1966, p. 19.

5. Systems costs.
6. Multi-year coverage.
7. A formalized system.[1]

He states that an effective program must reflect decisions already made, must be comprehensive and specific, and must be a dominant tool of effective management around which all other planning and control devices revolve. It must also be procedurally flexible to permit the incorporation of changes. The program is the singular device by which management can specifically pinpoint responsibility and authority for activating the organizational mechanism. It must be detailed yet distinguishable between direct, independent portions and support segments. In addition, total decision costs must be shown broken down into two parts--capital investment and operating costs.

The focus of the operating portion of the program must be on expenses since they represent the cost of consumed resources in a given time. Obligations are not considered expense elements because they have no relationship to consumption.

In the DOD programming system, a mission-oriented program structure is based upon four primary military tasks:

1. Winning an all-out war.
2. Defending the country against attack during war.

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[1] Henry S. Rowen, Assistant Director, Bureau of the Budget, "Character and Usefulness of a Programming System," Speech given at a meeting of the Budget Bureau's Summer Seminar on System Analysis and Program Evaluation, Washington, D.C., August 20, 1965. (Hereafter cited as Rowen speech.)

3. Fighting a conventional or limited war.

4. Moving fighting forces to the scene of action or need.

These military tasks are backed by general support activities, such as reserves, research and development, and supply. These constitute the original seven major DOD programs--or program packages, as they were initially called.[1]

The term programming system is defined as the total process of developing, submitting, and implementing approved programs. It involves the analytical studies, planning, determination of objectives, program development, budget analysis, and the control of resource inputs required to achieve a desired military output.

Major programs represent aggregations of similar military missions and supporting functions into a broad functional classification. Each major program is a combination of program elements designed to accomplish a definite objective or plan that is specific as to the time and methods.

The program element is the smallest unit of military output controlled at the Department of Defense level. It is a combination of men, equipment, and facilities which constitutes an identifiable military capability or support activity. All program elements taken together constitute the complete planned output of the DOD. Each activity within DOD fits into a program element not shared with any other activity. Each program

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[1] Financial Management in the Navy, p. 3-3.

element is identified by a code number that indicates the major program and the service to which it belongs.

Since major decisions are made in terms of program elements, the DOD programming system requires costing by program elements, with the costs divided into three categories:

1. Research and Development Costs - those costs primarily associated with research and development efforts, including the development of a new or improved capability to the point where it is ready for operational use.
2. Investment Costs - the expense required beyond the development stage to introduce into operational use a new capability, to procure initial, additional, or replacement equipment for the operating forces, or to provide for major modifications to an existing capability.
3. Operating Costs - those necessary to operate and maintain the capability throughout its projected life.[1]

Resources are fitted into "resource categories" for purposes of relating them to program elements and respective cost categories. A resource category includes either a unique type of input or a homogeneous grouping of related matter. Every resource input falls into one of the categories so that the sum of all categories equals total DOD resource requirement. There are four major resource categories:

1. Items of equipment.
2. Military construction.
3. Manpower.
4. The functions and activities financed under the Operation and Maintenance appropriations.[2]

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[1] Financial Management in the Navy, p. 3-5.

[2] Ibid.

Each grouping must be sufficiently homogeneous to be significant for top-level planning and control. Just as the sum of all program elements constitutes total military output, so the sum of all resource categories equals the total resource input. Whenever possible, resource categories are measured in both financial and nonfinancial terms. Many categories combine a number of heterogeneous items or activities which can be measured only in financial terms. Several financial measures, differing primarily in time-phasing, are possible.

The sum of all program elements constitutes the aggregate military output, and the sum of all resource categories equals the total resource input for Defense programs. Thus, these two dimensions of planning, the input and output, provide different slices of the same basic overall DOD program. Neither dimension alone gives sufficient information for all DOD planning and control, but together they provide a complete picture of the sources and uses of resources among the various DOD activities.

Since program element and resource category planning are both based on the same underlying program, the two dimensions must be consistent. One of the prime characteristics of the system is that it seeks to identify explicitly the tie between each program element and resource category. This is the only method possible to impart the total impact of the overall program and to show whether the necessary resource inputs are available.

Budgeting

Currently, the interface of the "program format" with the "appropriations format" is lengthy and unwieldy. Budgets are prepared and submitted for congressional review and legislation by object class and are oriented to the appropriation structure. Programs often include various appropriations, object classes, and the costs of more than one DOD activity. Congress is generally familiar with the appropriation language and format and has been traditionally attuned to it. Strict program structure and inter-service relationships in financial terms are inconsistent with the legislative viewpoint. The integration of the two funding concepts must be accomplished by a dual budget document that makes the translation conceivable. A DOD publication states:

> The Defense Budget has been divided since the early 1950's into five categories--military personnel, operations and maintenance, procurement, construction, and research and development. These five classifications form the framework for the DOD Budget which is submitted to Congress each January as part of the President's Budget. They are the principal classifications in which Congress enacts some fifty appropriations to the Defense Department.[1]

The basic programs of the Department of Defense are:

1. Strategic Forces.
2. General Purpose Forces.
3. Specialized Activities (force-oriented but not part of 2 above).
4. Airlift/Sealift.
5. Guard and Reserve Forces.

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[1] A Primer on Project PRIME, p. 39.

6. Research and Development.
7. Logistics.
8. Personnel Support.
9. Administrative.
10. Military Assistance.

This breakdown is quite different from that used in the budget that goes to Congress. The budget structure is service-oriented by the Army, Navy, and Air Force, and within services by categories such as pay, maintenance and operations, and construction.[1]

Once the financial description has been set forth in the budget, further justification must be made in the form of qualification. According to BOB Circular No. A-11, Instructions for the Preparation and Submission of Annual Budget Estimates, the following summary statements are required for each budget submission:

> 1. A summary and highlight memorandum which will lead off the budget submission of each agency. This narrative will summarize the principal highlights of the agency's budget. It will outline briefly the objectives and plans on which the estimates are based, set forth the broad policies which are proposed, and indicate the total amounts requested to carry forward those policies;
> 2. A statement of receipts showing actual receipts for the past year and estimated receipts for the current year and budget year;
> 3. A table listing and summarizing authorizations and expenditures, together with a table on public enterprise funds;
> 4. An anlysis of unexpended balances setting forth the unobligated and total balances at the start of the past year, current year, budget year, and the year following the budget year and covering all general fund accounts, special funds, and management funds;

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[1] Ibid., p. 34.

5. A summary of budget authorizations, expenditures, and balances--that is, total figures for the agency as a whole.[1]

With regard to language sheets, Circular A-11 states that these must contain, for each appropriation item, the text of the appropriation as enacted for the current year, together with the changes necessary to make the text read as proposed for the budget year.

The program and financing schedules consist of three sections. The first classifies obligations by activities, the second sets forth the method of financing the program and the disposition of unused amounts, and the third shows the relation of obligations to expenditures.

These sections are followed by narrative statements on program and performance. The primary purpose of narrative statements it to present in summary form the work plan and its expected accomplishments in relation to the financial estimates, together with a measure of program and performance. Because these statements are a basic part of the budget, they should focus on work to be done, services to be rendered, or payments to be made during the budget year.

The purpose of this budget justification is to explain and support the estimates for program evaluation.

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[1] Bureau of the Budget, Executive Office of the President, The Bureau of the Budget: What It Is - What It Does, June, 1966, p. 29.

Management Control and Accounting

The cycle of the PPB system is completed with the application of accounting functions and their contribution to management control. Program elements are expressed in terms of physical description. The physical description, an articulation of the results of effort, necessitates both a qualitative and a quantitative measurement. The expression of program measurements in quantitative or qualitative terms can be more easily explained by an example. "FBM" submarines are designed to carry specific Polaris Missile payloads. The number of submarines on operational patrols within range of predetermined targets is a quantitative measure expressed as expected firepower. The quality of this firepower is described as the degree of deterrence against the threat of aggression. Expected firepower is a veritable factor, whereas the deterrent measure is hypothetical since the evaluation of the present threat has never been tested. FBM submarines are a part of the Strategic Forces, one of the ten major DOD programs.[1]

An analysis of how PPB works can be made by first assuming that a deterrent program is nonexistent and the enemy "threat" materializes. The costs of repelling enemy action by extensive military aggression, force mobilizations, and activation of reserve weaponry and other implements of war must be compared with the expense of maintaining adequate deterrent programs. This comparative difference is one of the factors involved in the

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[1] Rowen speech, p. 6.

qualitative justification of program costs. The financial terms of a program, as well as its physical qualifications, must be continuously reevaluated, restudied, and reapplied to the framework of national objectives, then recycled through the PPB system and projected into various time planes. Any resulting change implies continual updating of plans and objectives to provide a formalized system of flexible program management.

The PPB system applied in this type of framework should enable program managers to effect optimum resource utilization and effective, timely decision making.

In referring to a formalized system, Mr. Rowen specifies that it should not be an "inflexible procedure but a regular one."[1] The continual reevaluation and replanning of programs, and the application of management control functions must be accomplished on a scheduled basis throughout the life of each program. Further, an interface between the PPB cycle and the annual DOD budget cycle must be maintained so that "thoughtful and considered review of programs"[2] is not limited to periods of budget formulation.

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[1] Ibid., p. 8.

[2] Ibid.

Competition for Funds

The budget process provides justification for decisions affecting the size and scope of programs[1] throughout the government. Administrators who take the pedestrian approach to budgeting find it difficult to understand when the lack of funds necessitates the preemption of one desirable program over another.

In peacetime, the availability of funds is the limiting factor that determines the size of a fleet, the number of ships and planes to be constructed, the extent of the research and development effort, and the degree of readiness in hundreds of other programs essential to a balanced and adequate defense program.

Within the DOD, there is strong competition for funds. Each year the programs of the three military departments must be weighed, and decisions made on their relative merits. Decisions on competing programs are made within the framework of the Five-Year Force Structure and Financial Program.

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[1] It should be pointed out here that the term "program" has no single meaning. In one sense it indicates broad Federal areas of interest--the defense program, for instance, or the health and welfare program. Within DOD, it indicates the Five-Year Force Structure and Financial Program, as well as the major military missions and support functions that it comprises. It is often used to refer to the Navy's major areas of military emphasis, such as the Anti-Submarine Warfare Program, the Polaris Program, and so forth. Bureau and office personnel often speak of their "programs" when referring to the major activities and segments under their management responsibility. Budget categories are also sometimes called programs, as for example, the procurement program or the R & D program. At times appropriations are called programs. In addition, subdivisions of an appropriation below the budget activity level are labeled programs, and funds are often justified under such headings.

In a sense, all Federal programs must compete for available funds. In a particular year, for example, there may be considerable pressure for increased expenditures for nonmilitary programs, such as aid to education, medical research, or aid to foreign countries. Nonmilitary programs thus may be said to compete with the various defense programs for an increased share of the Federal budget.

CHAPTER III

ADMINISTRATION AND BUDGETING IN THE FAIRFAX COUNTY SCHOOL SYSTEM

Before considering the possible use of a PPB system for the Fairfax County schools, the present approach to administration and budgeting must be discussed.

State Board of Education

The general public educational policies of the State of Virginia are established by the State Board of Education. The Board members are appointed by the Governor subject to confirmation by the General Assembly. The Board has five major functions: to divide the state into appropriate school divisions; to certify to local school boards those persons qualified to be division superintendents; to be responsible for the management and investment of the state school fund; to establish the rules and regulations for the management and conduct of the schools; and to select the textbooks and educational appliances used in the schools of the state.[1] The educational desires of the local communities may at times conflict with the edicts of the State

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[1] State Board of Education, Structure of Public Education in Virginia (Richmond: State Board of Education, 1964), p. 11.

Board. Since Fairfax County is self-sufficient up to 69 per cent and dependent upon state subsidization for 20 per cent of its school budget, it is apparent that goal congruence can be assured only one-fifth of the time. The required certification of the county superintendent by the State injects an additional political factor into the local system.

The State Board of Education employs personnel trained in the fields of vocational arts, science, mathematics, physical education, and the social sciences, who coordinate the various local programs by close liaison with the county and municipal regional program supervisors. This communication pipeline establishes greater understanding and concurrence with State Board policies. The local administrations provide feedback in the form of local costs measurements, regional economic conditions, ethnic patterns and problems, plans, and the reflections of area politics. Since Fairfax County, located in the Northern Virginia regional area, is basically suburban oriented, the state assistance and guidance given to it will necessary be different from that given to rural counties.

The County Board of Education

The Fairfax County School System is typical of a county-governed functional organization within the State of Virginia except that it is subject to influences of the large metropolitan Washington area. Its operating funds are derived principally from general property taxes, fees, licenses, permits, fines, forfeitures and penalties, revenues from the use of money

and property, and revenue from the commonwealth.[1] The largest single source of income for the school system is the local property tax. Fairfax County residents pay $4.05 for each $100 of property, based on an assessment rate of about 35 per cent of true value. About 62 per cent of that revenue is spent on the schools.[2]

The Board of County Supervisors, the legislative body of the county, is responsible for making administrative policies. It has seven members, one from each magisterial district, each elected for a four-year term. The Board of Supervisors, in turn, appoints seven persons to serve on the County Board of Education for staggered two-year terms, for which they are paid $3,000 per year.[3] The Board of Education sets specific policy for the administration of the county school system. The Superintendent of County Schools submits an annual budget in January to the Board of Education for review, approval, and forwarding to the Board of County Supervisors, who in turn review and finally approve the budget in conjunction with the remainder of the county budget. This final approval authority has the prerogative of specifying approval by line item. Thus far, only general limitations have been imposed on the aggregate request with authority for

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[1] County of Fairfax, Virginia, 1966 Annual Report - Year Ended June 30, 1966 (Fairfax: Fairfax County Division of Information, June, 1966), p. 61.

[2] John Egerton, "Profile of a School System," Southern Education Report (Nashville: Southern Education Report Service, November, 1966), pp. 26-33.

[3] Superintendent's Proposed School Budget for 1967-68, p. 9.

specific fund assignment passed downward to the Board of Education and the Superintendent of Schools.[1]

The School Budget

In the formulation of a budget for the Fairfax County School System, the proposal and expenditures are separated into eight major categories:

1. Administration
2. Instruction
3. Coordinate Activities
4. Transportation
5. Operation of Plant
6. Maintenance
7. Fixed Charges
8. Capital Improvements Expenditures.

These major divisions and each activity or subfunction are identified by a five-digit code in the 50000 series. Another set of four-digit object codes is used to identify the individual line items within an activity group. The budget is expressed in two columnar divisions, as explained below:

> The "A Budget" is composed of requests for the number of personnel and cost required to maintain present levels of service commensurate with predicted pupil population figures. Salary costs are never mixed with other costs. The actual salary and

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[1] Interview with Dr. Barry Morris, Assistant Superintendent for Finance, Fairfax County School Board, Fairfax, Va., February 28, 1967. (Hereafter cited as Morris interview.)

wage rates are applied by the use of standard tables after the personnel numbers are determined by individual schools and the administrative offices. The monetary guidance and limitations are predetermined by the Superintendent and the Board of Education.

The "B Budget" represents requests to finance any new "program" proposals and improvements in the level of services or the expansion beyond that required by normal growth.[1]

The total budget request for 1967-68, totaling $65,109,305, exclusive of capital improvements, involves the continuance of 7,226 employees and new employee acquisitions of 409. The basis for the budget for 1967-68 is the 1966-67 budget, which was to serve 102,000 pupils in 137 school plants. The predicted pupil population[2] for the forthcoming year is 107,000 in 145 school plants. The population figures have been revised downward on the basis of actual attendance figures in the fall session of 1966. The revision and new pupil base is as shown in Table 2.

As can be seen from Table 2, normal growth can now be expressed in terms of a percentage increase in the size of the school system:

4.7% increase in number of pupils

5.8% increase in number of schools

10.5% increase in size of the plant (capacity).[3]

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[1] Interview with Kenneth Harrison, Fairfax County School's Budget Officer, Fairfax, October 14, 1966; February 28, 1967; and March 8, 1967. (Hereafter cited as Harrison interview.)

[2] Pupil population is an <u>average</u> daily membership and is not necessarily the total number of students enrolled on any given day.

[3] <u>Superintendent's Proposed School Budget for 1967-68,</u> p. 1.

TABLE 2

SCHOOL PLANT/PUPIL POPULATION RELATIONSHIP

	1965	1966	1967	1968
Number of school plants	121	130	137	145
Capacity of schools	85,270	96,815	107,930	119,325
Number of pupils:				
Elementary	48,123	51,126	54,440	55,900
Intermediate	14,800	16,117	17,440	18,600
Secondary	25,755	27,798	30,320	32,500
Total	88,678	95,041	102,200	107,000
Percentage growth in pupils:				
Elementary	8.3%	6.2%	8.7%	2.7%
Intermediate	10.1	8.9	9.6	6.7
Secondary	11.2	7.9	7.9	7.2
Total	9.4%	7.2%	7.8%	4.7%

Source: Superintendent's Proposed School Budget for 1967-68, p. 4.

Areas included in the budget are those related directly to the increase in the number of pupils--e.g., teachers, guidance counselors, and helping teachers; those related to the increase in the number of school plants--e.g., principals, maintenance vehicles, school buses, and school cafeteria employees; and those related to the increase in size of aggregate school plant--e.g., custodians, fuel, and utilities. Growth is not the only factor taken into consideration in the budget. The consumer price index rise since 1966 has been 4 per cent, which affects the increased costs of

school supplies. The salaries of all personnel who have not reached the top of their respective scales will increase 3 to 6 per cent as they earn annual experience increments on present scales.[1]

The relationship of student enrollment to requirements become apparent in a comparison of (1) an aggregate budget based on pupil enrollment increases (4.7%) plus the inflationary trend reflected in the consumer price index (4%), totaling $59,101,000, and (2) the "A Budget" requested by the school superintendent, of $58,244,167. A further indication of the pupil enrollment impact can be seen in a comparison between the figures for the "Instruction" function in the budgets of 1966-67 and 1967-68, respectively. This comparison is shown in Table 3.

The individual budget requests from the various functional areas are based on the preceding annual budget, since actual performance figures reflect anticipated growth. In the functional areas of service support, coordinate activities, transportation, plant operation, and maintenance, the cost experience of prior years is an important factor to be considered.

In making up this budget, each school principal is provided with the previous year's budget figures and actual costs and is expected to apply this experience or performance criterion to his facility. The principal must conduct a survey of his area of service to determine the number of pupils expecting to enroll the following year. The survey will contain such data as

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[1] Ibid.

TABLE 3

COMPARATIVE BUDGET FACTORS

	1966-67 Budget	1967-68 Budget	Percentage Increase
Instructional supervision	$ 665,242	$ 743,638	11.8%
Principals	4,317,492	4,640,911	7.5
Teaching	32,663,723	34,438,606	5.5
Special education	1,789,488	1,913,488	6.9
Instructional materials	2,967,119	3,157,278	6.4
Other costs instructional	138,407	146,240	5.7
	$42,541,471	$45,040,161	5.9%

Source: Superintendent's Proposed School Budget for 1967-68, p. 3.

the number and ages of children per residence, occupational livelihood of the head of the house, type of residence (rental or owned, apartment or one-family dwelling), and distance from school. Armed with this information, the principal can determine the prospective number of students per grade level that will occupy the facility. The number of teachers required per grade and per facility are then decided upon. Projections of instructional materials as well as text books and supplies are made on the basis of this student population. The administrative costs are determined primarily on past experience factors. These costs are equated to per-pupil cost and enrollment under the "A Budget." Anticipated increases in

expenditures without commensurate increases in pupil enrollment must be fully justified by comparison with pupil/teacher ratios or by obsolescence and normal wear and tear of equipment. Requests for increases in administrative personnel must be accompanied by a narrative justification in the form of job descriptions and changes of present personnel assignments.

A statement by Fairfax County School Superintendent Earl C. Funderburk pertaining to staffing objectives indicates the justification for the increased staffing of 778 personnel (369 in the "A Budget" and 409 in the "B Budget"):

> In 1964 a comprehensive study of staffing in the intermediate and secondary schools was conducted and long-range staffing plans were developed for implementation over a period of several years. The following year a similar study was conducted with respect to elementary schools. Concurrently with these studies the problem of decentralizing our school system in order to make it more responsive to the needs of local subcommunities throughout the country has been given intensive study.
>
> Resulting from all these studies have been some improvements in staffing during the past two years and modest next steps in this program of improvement are proposed for 1967-68.
>
> . . . .
>
> The thrust of these proposals is to provide more effective supervision and greater productivity in our increasingly complex total operation, to provide improved environment and "time to teach" for the classroom teacher, to provide more adequate service in the area of libraries and instructional media of all kinds, and to bring supporting services and plant operation, maintenance, and supply into a more efficient framework for meeting the needs of individual schools. While it is certainly true that a good teacher and a suitable classroom form the heart of our quality instructional program, it is also true that the best teacher cannot function adequately if subjected to the confusion and frustrations of inadequate administrative services.[1]

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[1] Superintendent Earl C. Funderburk's message to the Board of Education in justification of the school budget for 1967-68, dated January 12, 1967.

Table 4 shows the staff increases in the school system requested in 1967-68 over 1966-67.

TABLE 4

INCREASE OF PERSONNEL STAFFING BUDGET 1967-68 OVER 1966-67

School Operational Function	1967-68				1966-67 Budget No.	Difference
	"A" Request		"B" Request			
	No.	Percentage	No.	Per centage		
Administration	112	4.7%	21	19.6%	107	26
Instruction:						
Instructional Supervision	55	5.8	12	23.1	52	15
Area Supervision	-	-	8	-	0	8
Principals' Offices	525	5.0	75	15.0	500	100
Teaching	4,444	5.5	134	3.1	4,215	363
Special Education	210	3.4	36	17.8	203	43
Instructional Materials	212	5.5	36	17.9	201	47
Other Costs Instructional	-	-	-	-	-	-
Total Instruction	5,446	5.3	301	5.8	5,171	576
Coordinate Activities	20	-	3	15.0	20	3
Pupil Transportation	509	4,7	10	2.1	486	33
Operation of Plant	837	7.0	50	6.4	782	105
Maintenance	302	3.8	24	8.2	291	35
Fixed Charges	-	-	-	-	-	-
Total Operating Budget	7,226	5.3%	409	6.0%	6,857	778

Source: Calculated from Superintendent's Proposed School Budget for 1967-68, p. 3.

Staffing problems are only one of the difficulties encountered in making a budget. The best method to show other difficulties encountered is to analyze the budget for 1967-68 by major activity, giving the narrative function and source of requests.

Administration (Activity Code 50000)

The budgeted expenditures of this major category include the costs of general planning, development of new school plants, recruitment, personnel administration, record keeping, school lunch management, property control, procurement, budget making, payroll, insurance, accounting, research, community relations, and the general coordination of all activities of the county public schools. Included is the direct cost of general policy making and community control of the school system through the salaries, travel, and meeting expense of school board members. Included are fourteen subfunctions and twenty-seven sub-subfunctions or line item expenditure codes. A description of the fourteen subfunctions follows.[1]

School Board (Activity Code 50100): Budgeted for $32,840 in salaries and anticipated travel expense.--The Board reviews and approves and forwards the total budgets to the County Board of Supervisors. Any changes in the budget or functional expenditures are reviewed and approved by the School Board before implementation.

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[1] Superintendent's Proposed School Budget for 1967-68, pp. 7-15.

Superintendent's Office and Administrative Assistant (Activity Code 50201): Budgeted for $51,740 in salaries, secretarial and travel expenses.--The Superintendent and his assistant coordinate the school program, initiate planning for present and future programs, and direct the operational details. This office is the coordination center for the school administration and planning. A contract consulting firm is at present operating out of this office to prepare an organization chart and procedures manual.

Associate Superintendent's Office (Activity Code 50202): Budgeted for $42,364 in salaries and travel.--The Associate Superintendent acts for the Superintendent in his absence. This office is involved with pupil placement, census, and control of construction programs. Pupil placement and census are important factors in the planning and budgeting for the schools. An analysis has shown that the population in some school subdistricts is maturing and as a result the requirement for public education is lessening yearly. This situation affects pupil placement and requires close coordination between school principals and this office to keep abreast of the population changes and public service. This census function is in addition to that conducted by the county office and is different with respect to the method obtained and the information derived.[1]

Assistant Superintendent for Instruction (Activity Code 50203): Budgeted for $25,650 in salaries and travel.--This official is responsible

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[1] Interviews with David Spirt, Planning Analyst, Fairfax County School Board, Fairfax, Va., March 2-8, 1967. (Hereafter cited as Spirt interview.)

for coordinating and directing the total instructional program. He initiates the guidelines for all new programs or a change of procedure. He intercedes in all requests for expenditures by school principals, instructional directors, and supervisors. Since instruction is the major effort of the entire school system, any budget changes that affect teachers, curriculum, or educational supplies and equipment must pass through this office.

Assistant Superintendent for Personnel and Staff (Activity Code 50204): "A Budget," $218,812; "B Budget," $58,921. Total, $277,733 in salaries and travel.--The personnel department is responsible for the management of personnel services, recruitment, counseling, employee benefits, personnel records, certification, job analysis, and related duties for more than 8,000 employees and 1,500 new employees annually.[1] This department maintains current information on personnel pay scales, salary increases, national salary statistics, and personnel attrition, all of which must be coordinated with the finance and budgeting divisions. The department is organized into four major personnel categories: elementary, intermediate, secondary, and supporting services. The kindergarten program to be instituted during 1967-68 will add a requirement for an additional category.

Assistant Superintendent for Finance and Staff (Activity Code 50205): "A Budget," $225,652; "B Budget," $28,068. Total, $253,720 in salaries and travel expenses.--This department is responsible for administering the

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[1] Superintendent's Proposed School Budget for 1967-68, p. 9.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

expenditure of $95 million for programs, including adult and preschool education, on-the-job training, a complex of Federal grants and contracts, a $20 million annual construction program, and an $8 million program of local school activity functions. The department is presently organized into three divisions: accounting and central services; budget, payroll, and systems; and audits and internal accounts. A fourth division is planned for 1967-68 to control general operating funds, a function currently assumed by accounting and central services. The Finance Department is the backbone of the administration in that it coordinates the budgets, measures performance, prepares financial justification to proposals for Federal aid programs and grants, and maintains the respective records. The flexibility offered by data processing procedures enables this department to fulfill the need for management information at all levels of the administration in a variety of functional formats. In order to effect further economies, a systems analyst is employed in systems purification. The Finance Department is presently engaged in an audit of the inventory of science supplies to provide a more effective and economical method of inventory control for all other materials and equipment. The reason for this measure is to determine the value of present supplies and equipment and thus maintain a perpetual accounting and method of accruing true cost to educational programs.[1]

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[1] Harrison interview.

Assistant Superintendent for Construction (Activity Code 50206): Budgeted for $26,044 in salaries and travel.--This category includes only the administrative costs of the Assistant Superintendent. The remainder of the employees and materials involved in this category are accounted for under the construction program within the Capital Outlay Fund Budget. This office provides budgetary information for the makeup of the Capital Improvements Fund which is used for making additions to existing plants or new school construction. These costs are presently unrelated to the school operating fund. The coordination for these programs and respective planning is carried on by the office of the Associate Superintendent.

Assistant Superintendent for School Services (Activity Code 50207): "A Budget," $64,164, "B Budget," $12,316: Total, $76,980 for salaries and travel.--This office is responsible for the maintenance and operation of the school plant, school food services and supply services, including purchasing, warehousing, and distribution. This function cuts across several functional and budget categories. It is a coordinating position for supplying anticipated expenditures for the various functions listed above. This official has under him a director for maintenance and operation of the school plant, a director for the school food services, and a maintenance engineer for appraising the feasibility and design of operational proposals for repair and innovation throughout the existing school plant. This office entails close liaison between school principals, program supervisors, maintenance personnel, and engineers. The allocation of school supplies,

books, and instructional equipment is a highly complicated task which must be coordinated from one central office such as this in order to maintain inventory integrity and authentic program supply costs.

Coordinator of Research and Information (Activity Code 50209): "A Budget," $132, 026; "B Budget," $13, 548. Total, $145, 574 in salary and travel expenses. --The responsibility for improving educational services through Federal grants and other measures rests with this office. This function is best described in a statement made by Superintendent Funderburk in a paper delivered before the 1965-66 Annual National Conference on School Finance:

> Federal-support programs have enabled local school systems to provide long-sought services, facilities, and equipment which could not have been provided without such support. . . .
>
> To avoid overlooking significant resources which may be available to us, we have employed a full-time "search and seizure" office. . . .
>
> As a Washington suburb we are intimately familiar with the growing inadequacy of the local property tax, the shifting sources of community wealth (and the power of the Federal government to tap these sources), the mobility of our population, the need for national unity, and the many other arguments for increasing Federal support.[1]

For purposes of budgeting, this office must decide upon the amount of matching funds which must be contributed by the local school administration to quality for each specific Federal or state-supported program. Close liaison is maintained between the coordinator and the finance office. Some

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[1] Dr. Earl C. Funderburk, "The Local-State-Federal Partnership in School Finance as Viewed by a Local Administrator," Partnership in School Finance (Washington: National Education Association, 1966), pp. 54-55.

matching contributions from local sources must be in the form of "in kind" labor which must be obtained without remuneration--e. g., legal assistance, medical services, and clerical help.[1] The requirement of some Federal aid programs is that local funds finance the operation with the stipulation that successful completion will result in full reimbursement. In some cases, the salaries and services are supportive only in proportionate amounts and participants must be carried partially under the school operating budget and partially under the aid programs.[2] In these programs, various combinations of funding difficulties arise which consistently test the interpretive skills of the budgeteer and the administrator.

Dr. Funderburk emphasizes the complexity of the budgeting and accounting process.

> Each of these programs is operated under a separate contract or set of special regulations administered by different offices in the Federal government. The multiplicity of special financial accounts, reporting procedures, and the dispersion of special responsibilities among staff directors and supervisors present a challenge to administration at the local level.[3]

School Community Relations (Activity Code 50210): "A Budget," $24,903; "B Budget," $11,054. Total, $35,957 for salaries and travel

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[1] Interviews with Peter Watts, Board of Education Supervisor for capital and auxiliary funds, and Howard L. Jones, Board of Education, Chief Accountant - Federal programs, Fairfax, Va., February 28 and March 2, 1967. (Hereafter cited as Watts interview and Jones interview, respectively.)

[2] Interview with Dr. George G. Tankard, Jr., Coordinator of Federal Programs, County Board of Education, Fairfax, Va., March 8, 1967. (Hereafter cited as Tankard interview.)

[3] Funderburk, "The Local-State-Federal Partnership in School Finance . . . ," op. cit., pp. 54-55.

expenses.--The director is responsible for providing citizens with information about their schools through news media and publications. He works with program directors and other staff members to develop bulletins, course catalogs, and curriculum guides. This implies that he must have knowledge of the particular programs to be stressed or the curriculum mix that needs emphasis in the budget. In this area, accurate budgeting is difficult to achieve and performance hard to measure.[1]

School Audits (Activity Code 50211): Budget request, $37,300 for salaries and travel expenses.--The function of the auditors is to assist principals with individual internal school accounts and student activity funds. The auditors assist the director of the school lunch services in establishing the budget for supporting fund requirements over and above the revenue from the Federal School Lunch Aid Program and the sale of meals. One important task in budgeting for these funds is the necessity of providing morning and noon meals for underprivileged preschool children enrolled in the "Head Start" program.[2]

Central Services (Activity Code 50212): "A Budget," $51,228; and "B Budget," $4,512: Total, $55,740, for salary expense.--This function entails supervision and accomplishment of the following services for the school administration staff: mail, duplicating, printing, microfilms,

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[1] Interview with Albert E. Holliday, Director of School Community Relations, County Board of Education, Fairfax, March 8, 1967.

[2] Jones interview.

telephone and switchboard service, and part-time accounting for special school allocation and drawing accounts. The budget task for this function is nil; however, difficult decisions arise in connection with its relationship to the budget preparation for the Activity Code 50299, Other Administrative Expense, which will be explained subsequently in detail under that functional area in this paper.

Assistant Superintendent for Administration (Activity Code 50213): "B" budget, $23,934, only for salaries and travel expenses.--This position is an innovation designed to provide a means of decentralization and to increase the autonomy of some individual school principals, yet maintain the close relationship necessary for pupil placement, curriculum supervision, and centralized planning, budgeting, and control.[1] This proposal will be discussed in depth under Activity Code 51100.

Other Administrative Expense (Activity Code 50299): "A" budget, $165,529, and the "B" budget, $120,468, totaling $285,997.--This account is basically for office supplies, postage, service awards, miscellaneous school board meeting expenses, surveys and reports, temporary help, legal fees, advertising for recruitment of teachers, printing transfer costs from the county, commercial fees, professional dues and memberships, books and reference materials, and the incremental costs expected from salary adjustments, reclassifications, and special merit increases. The budgeting

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[1] Spirt interview.

[illegible]

[illegible]

[illegible]

[illegible]

problem within this activity code is that it involves the anticipated requirements of all other subfunctions previously discussed, as well as some requirements of the instructional supervisors and directors who use this classification for supply, books and reference materials, postage, and printing expense as a more convenient and centralized procedure of obtaining common resources. The budgeted cost is derived from previous annual expenditures plus a growth percentage factor. The sub-subfunction 'cost of scales' appears under this activity code to cover the anticipated increase in salaries if the proposed salary/wage raise is approved by the County Board of Supervisors. This line item under the "B" request amounts to $71,660 for the administrative activities only. Similar sub-subfunction costs are appended to all major activity codes.[1]

Although Barry Morris and Kenneth Harrison of the school administration do not agree that the annual budget contains contingency features, the writer submits that this particular activity code has some built-in budget flexibility. As proof of this point, the amount budgeted under sub-subfunction 1005, legal fees, in 1966-67, was $10,750. The expenditures and encumbrances, as of December 31, 1966, were $1,951.64, and the unencumbered balance was $8,798.36.[2]

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[1] Morris interview and Harrison interview.

[2] Fairfax County School Board, Quarterly Budget Review, December 31, 1966, p. 3.

Instructional (Major Activity Code 51000)

This major functional category includes the expense of providing a supervisory service to develop, improve, and coordinate the instruction in each school and grade level, providing an evaluation of curriculum programs which have never been fully developed throughout the entire county. The additional cost of planning and preparing for free kindergartens in the fall of 1968 is a major issue of the entire school operating budget which is discussed in this major functional area only by the budget request document.[1] In this functional category, there are fifty-eight subfunctions and forty-eight sub-subfunctions or line item expenditures. The subfunctions are as described in the succeeding pages.[2]

Supervisors (subfunction code 51001). --The "A Budget," $653,573; "B Budget," $63,385. Total, $716,985 for salaries, wages, books and reference materials, travel expenses, and accreditation of elementary school expense. --These professional personnel provide budgeting guidance to the school principals and the teaching staff relating to the various specialty fields that they supervise. Their requests, when submitted by the schools, are reviewed and approved by the Assistant Superintendents for Instruction and for Finance. In case of disagreement, a school principal has the authority to override the supervisor's recommendation.[3] The

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[1] Superintendent's Proposed School Budget for 1967-68, p. 17.

[2] Ibid., pp. 18-67.

[3] Spirt interview.

various supervisors actively participate in the planning and budgeting for new installation cost estimates in capital improvement projects. There are nineteen supervisors and directors who coordinate scholastic curricula; these positions are shown in Table 5.

TABLE 5

ORGANIZATIONAL STRUCTURE OF SUPERVISORY PERSONNEL

Assistant Superintendent for Instruction

- Director of Elementary Education
  - Supervisors
- Director of Intermediate Education
  - Supervisor
- Director of Secondary Education
- Director of Vocational Education
  - Supervisor of Industrial Education
  - Supervisor of Industrial Arts
    - Assistant Supervisor
  - Supervisor of Distributive Education
  - Supervisor of Home Economics
  - Supervisor of Business Education
- Assistant Supervisor of Art
- Assistant Supervisor for Accreditation (Elementary)
- Supervisor of Music
  - Assistant Supervisor
- Supervisor of Guidance
- Supervisor of Health and Physical Education
- Supervisor of Mathematics
  - Assistant Supervisor
- Supervisor of Science
  - Assistant Supervisor
- Supervisor of English
  - Assistant Supervisor
- Supervisor of Social Studies
  - Assistant Supervisor
- Supervisor of Foreign Languages

Source: Compiled from the Superintendent's Proposed School Budget for 1967-68, pp. 18-21; and interview with Louis Godla, County School Board Director of Vocational Education, Fairfax, October 15, 1966, and March 3, 1967 (hereafter cited as Godla interview).

Curriculum Conferences (Subfunction code 51002); the "A" budget, $64,565; "B" budget, $600. Total, $65,165 for salaries, travel, and printing expenses.--Planned expenditures for the development and writing of

curriculum guides for all levels of elementary, intermediate, and secondary schools are included. The budgeted amounts are based on expenses of prior years.

In-service Training (subfunction code 51003); the "A" budget, $25,500; "B" budget, $4,540. Total, $30,040 for salaries of consultants who provide workshop training to teachers and other professional personnel.--Teachers are also partially reimbursed for tuition expenses incurred in taking special university courses. School principals, program supervisors, and the school administration, in special planning councils, decide the extent of these expenditures.

Kindergarten (subfunction code 51004); the "B" budget cost of $92,100 defrays the expense of teachers' salaries, consultants, supplies, books and reference materials, printing, and travel.--The budget statement qualifies this program as follows:

> In order to prepare our school for a sound program of free public kindergarten throughout the county, . . it is important that extensive planning and in-service training be accomplished well in advance. Since the enactment of state provisions for public kindergartens by the last general assembly, we have been engaged in preliminary studies and planning. By the fall of 1967 our plans will be sufficiently advanced to begin putting some of them to the test. It is therefore proposed that four full-time teachers be employed for demonstration kindergarten centers to be conducted during the 1967-68 school year and that two full-time consultants be employed for the year to assist with in-service training and coordination of our planning efforts.
>
> The entire effort will be conducted in concert with a proposed Federal grant for this purpose under Title III of the Elementary and Secondary Education Act of 1965 and it is expected that Federal grants for this purpose will cover the estimated costs of $92,100 in large measure if not entirely.[1]

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[1] Superintendent's Proposed School Budget for 1967-68, pp. 21-22.

It should be noted that no additional costs are anticipated or budgeted for transportation facilities which will be more extensive in 1967-68 than at the present time. Also, the pupil population and incremental increases do not reflect the anticipated increases in attendance. The kindergartens expect to have 8,000 additional children, equal to the first grade enrollment at the present time. Arlington County experienced a kindergarten class equal to 81 per cent of the first grade when its program was started.[1] A bulletin issued to elementary principals and teachers by the administrative offices indicates the planning accomplished to the present:

> It is the desire to house kindergartens at the local school level, thus, in effect creating a K-6 (kindergarten to sixth grade) concept. Where this is not possible--as it may be in some cases--then one of the following alternatives will be resorted to:
>
> Centralized community kindergarten
> Use of tempos (temporary buildings)
> Rental of space
> Use of two schools (common boundary)
> Rental/purchase of a lot and install a temporary kindergarten (school).[2]

Cost of Scales (subfunction code 51099); the "B" budget request for $55,896 is to allow for anticipated increases in teachers' salaries and civil service pay scales.--The budgeted amount is derived concurrently by the finance and personnel offices of the county and county school board.[3]

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[1] Spirt interview.

[2] Fairfax County Schools bulletin to elementary principals and teachers, Kindergarten 1968, October 19, 1966, p. 2.

[3] Harrison interview.

Area Supervision (subfunction codes 51100, 51110, and 51130); the "B" budget requests a total of $81,898 to be utilized in salaries, wages, and travel expenses.--The design is to decentralize the coordination of the administrative, supervisory, and supporting service functions down to a sublevel in two specific areas of the county which have become relatively fully developed. Each area is to be under the direction of the Assistant Superintendent for Administration. The area director will coordinate the instructional supervisory services described in the subfunctional code 51001, and all other services available within the school system. This coordinative, neoteric satellite commanded by the director and his assistant in each of the areas will function under the same constraints as the Superintendent of Schools, except that the scope of responsibility will be less broad. The budget document states:

> To achieve decentralization without anarchy, a channel for coordination /and communication/ between the county office and the local areas /is/ required. The position of Assistant Superintendent for Administration will accomplish this . . .
>
> In recent years much study has gone into the subject of organization for large school systems. Much of this study has been done through surveys by managerial teams. One of the big trends identified is that of organizing school systems into geographical districts or areas, each with its own district or area superintendent, and each of these area superintendents responsible for the total education program . . .
>
> Some of the theoretical advantages are:
>
> 1. It decentralizes both the administration and the control of the educational program.
> 2. It returns much control and autonomy to the individual school and area while at the same time maintains the advantages of the large system.
>
> . . . In a decentralized organization, a top rank official is always much closer to the locality. More important . . . is the effect of

> closing the wide gap that develops between administration and principals and teachers. . . . Another advantage is the increased efficiency resulting from a better organization.
>
> . . . /In reference to returning autonomy/ The teachers and principals under the decentralized system will be entrusted with greater responsibility in the area and in the school. It seems most likely that the organization would help produce a greater pool of capable leadership which is constantly needed for a big system.[1]

The budgeting task for each area will fall to the area director, who will coordinate the effort, review the result, and defend the request to the Assistant Superintendent for Administration.[2]

Cost of Scales (subfunction 51199); the "B" budget indicates an anticipated expense of $5,208 for salaries and wages to equate present scales to expected pay raises.

Principals, Assistants, Administrative Aides, and Clerks (subfunction codes 51200 through 51204; "A" budget, $4,474,710; "B" portion, $455,155. Total budget, $4,929,865 for these subfunctions.--It represents the salaries and wages of 145 elementary, intermediate, and secondary school administrative officials. The principal, who must administer his individual school as an administrative unit within the school system, insures the proper functioning of the instructional program, maintenance services, teacher assignment, pupil scheduling, school accounting, community relations, guidance, and student activities. The budgetary problems encountered

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[1] Superintendent's Proposed School Budget for 1967-68, pp. 23-25.

[2] Harrison interview.

at this administrative level are complex. The principal and his staff must relate financial requirements to fiscal consideration because of variances in student scholastic needs, parental desires, capacity/enrollment ratios, plant reliability, employee attrition, neighborhood economic status, and student transportation requirements. For this reason, the school principal's function in planning and budgeting is relatively autonomous.[1]

<u>Accreditation</u> (subfunction code 51205; "A" budget, $44,590, reflects anticipated expenditures for salaries, fees, dues, and supplies.--This subfunction relates directly to subfunction 51001, sub-subfunction of Assistant Supervisor for Accreditation (Elementary). The budget document articulates this expenditure as follows:

> This program shows a large increase in the "A" budget because 1967-68 will be our peak year in the 5-year program for achieving accreditation for all elementary schools. Fifty schools will undertake self-study programs and will be evaluated by visiting teams during the year.
>
> A large increase is necessary for paying the expenses of visiting evaluation teams and the clerical work associated with the production of self-study reports and evaluation.[2]

<u>Other Expenses</u> (subfunction code 51299); "A" budget, $121,611; "B" budget, $370,080. Total, $491,691, to defray expenditures for office supplies, postage, travel, printing, and contingent costs of scale.--The increasing cost of office supplies and wages are variable factors in the

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[1] Spirt interview.

[2] <u>Superintendent's Proposed School Budget for 1967-68</u>, pp. 29-31.

budget. Travel allowances of school principals have been grossly inadequate in the past. The greater emphasis by the administration upon meetings of school principals to consider the desires of the public in curriculum planning means increased funding for travel expenses. A cooperative effort between the principals of related elementary, intermediate, and secondary schools often results in reduced costs of travel for school/community relations. The requirement for attendance at out-of-state conferences and meetings of learned societies, proposed by the administration, necessitates increased travel.

Classroom Teachers (subfunction code 51301); "A" budget, $31,877,786; "B" budget, $512,502. Total, $32,390,288, for the salaries and travel expense of the classroom teachers of elementary, intermediate, and secondary schools.--The Assistant Superintendent for Instruction, the instrucional supervisors listed in Table 5, and all school principals, in committee, formulate the teaching staff requirements in the following manner:

Elementary:

Estimated pupils	55,200
Teachers (pupil/teacher ratio of 30:1)	1,840
Special assignment teachers	20
Teachers (reduced ratio in grades 1 and 2 - 28:1)	40
Total teachers	1,900

Intermediate:

Estimated pupils	18,400
Teachers (pupil/teacher ratio of 23:1)	800
Special assignment teachers	8
Teachers (reduced ratio 22.5:1)	18
Total teachers	826

Secondary:

Estimated pupils	32,300
Teachers (pupil/teacher ratio of 22:1)	1,468
Special assignment teachers	5
Planetarium teachers	6
Computer teacher	1
Teachers (reduced ratio of 21.7:1)	20
Total teachers	1,500[1]

The Finance and Personnel departments concurrently express these figures in dollar amounts, based on average cost of scales.[2]

Music Teachers, Driver Education, Physical Education Teachers, and French Instruction (subfunction codes: 51302, 51308, 31310, and 51311); "A" budget, $326,014; "B" budget, $154,050. Total, $480,064, for teachers' salaries in the schools' music programs, physical education teachers' salaries and travel, and French teachers' salaries in the elementary schools.--The teachers' salaries and supplies used in the driver education courses offered in secondary schools are supported entirely by state funds on a reimbursable basis.[3]

Guidance and Counselors (subfunction codes 51303 and 51304); "A" budget, $1,842,771; "B" budget, $108,749. Total, $1,951,520, for guidance directors, counselors, and clerks' salaries and travel expenses.--The directors are assigned on a basis of one for each intermediate and secondary school while the counselors are budgeted at the ratio of one for

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[1] Superintendent's Proposed School Budget for 1967-68, pp. 33-35.

[2] Harrison interview.

[3] Godla interview.

every 556 intermediate students and one for every 308 secondary pupils. The state-recommended ratio is 375 to 1 for intermediate schools.[1] The Assistant Superintendent for Instruction, Supervisor of Guidance, and cognizant school principals provide the criteria of ratio determination within the schools. They also coordinate the budgeting process for these subfunctions with the Assistant Superintendents for Finance and Personnel, respectively.

Helping Teachers (subfunction code 51303); "A" budget, $232,479; "B" budget, $11,300. Total, $243,779, is for salaries for "helping" teachers and their travel expenses.--These positions are part of the elementary supervisory teams organized on a regional basis to provide specialized assistance to classroom teachers in the subjects of art, music, science, foreign language, mathematics, and physical education. The budgetary responsibility for this subfunction is related to sub-subfunctions in code 51001, Supervisors.

Special Education - Supervision (subfunction code 51400); "A" budget, $44,472; "B" budget, $10,500. Total, $54,972, for supervisor and helping teachers' salaries.--The function is described within the budget document as follows:

> This section of the budget includes programs for the mentally and physically handicapped children and for those whose cultural background is so radically different from the norm as to require special training for successful participation in school. . . . The function of special education is to provide appropriate programs for the atypical child, or for the child with special problems.

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[1] Superintendent's Proposed School Budget for 1967-68, p. 37.

It includes the following special /instruction/ programs:

1. Mentally or physically handicapped
2. Gifted
3. Homebound
4. Remedial and special reading
5. Speech therapy
6. Psychological services
7. Standardized testing
8. Culturally deprived
9. Visually or aurally handicapped
10. Emotional and special learning problems.[1]

This subfunction is related to all other subfunctions coded in the 51400 series which form an interface with each other in both responsibility and budgeted costs.

Mentally and Physically Handicapped (subfunction codes 51401 and 51402); "A" budget, $681,901; "B" budget, $52,750. Total, $734,651, for salaries only.--This program is limited to the elementary and intermediate levels, and the major portion of its work is conducted in strategically located centers and schools. The mentally handicapped are divided into trainable and educable groups depending upon tested ability. The physically handicapped are mentally capable of full education but assistance is necessary in only one elementary school to aid the students with physical difficulties.

Gifted (subfunction code 51403); "A" budget, $31,000; "B" budget, $10,500. Total, $41,500, for teachers' salaries.--Instruction is provided for children with an intelligence quotient above 145 as an extension to the general curriculum provided in elementary schools. The special classes

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[1] Ibid., p. 41.

are located strategically throughout the county and the additional costs for transportation of these children is an unspecified expense within the pupil transportation budget.

Homebound Instruction (subfunction code 51404); total budget, $30,000 for teachers' salaries and travel expense. --This program, an extension of subfunction 51401 and 51402, provides for instruction to children who are confined to their homes temporarily because of physical or emotional difficulties.

Remedial Reading, Speech, Visually and/or Aurally Handicapped, and Learning Problems (subfunction codes 51405, 51406, 51411, and 51413); "A" budget, $918,046; "B" budget, $72,260. Total, $990,306, for teachers' salaries, travel, and supplies. --These subfunctions are combined because they represent program supplements to the normal school curriculum. The Supervisors of Speech and Remedial Reading are elements of cost within each respective program. The budgeting process is complicated by the variance in the number of students who require these supplemental services. The recommendations of classroom teachers and school principals provide the basis for the annual budget. When the employment level has been determined, the ratio of student to teacher must vary in accordance with additional requirements. The prior-year expense is a basis for the budget in these programs.[1]

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[1] Harrison interview.

Psychological Services (subfunction code 51407); "A" budget, $155,485; "B" budget, $45,378. Total, $200,863, for professional staff salaries, travel, and supplies of psychologists and psychometrists.--These services are provided to students who fail to make satisfactory adjustments in school. The budget in this area has increased approximately $50,000 per year over the last three years and can be related to the increases in pupil enrollment.[1]

Testing (subfunction 51408); "A" budget, $20,000, represents the local school system's contribution to the total expense for the Standardized Testing Program.--State subsidy is not included because it is an "in kind" provision.[2] The budgeted amount can be correlated to the pupil enrollment projections.

Culturally Deprived (subfunction code 51409); "A" budget, $32,584; "B" budget, $16,000. Total, $48,584, for teachers' and aides' salaries.--This program represents the local qualifying performance required to meet the standards for Federally supported preschool programs under the Economic Opportunity Act. The total cost for this program, $262,000, is budgeted for in the School Services fund, code 253.[3]

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[1] Spirt interview.

[2] A quantity of the test materials is provided free of charge by the state since it uses the results for comparison with national norms. Superintendent's Proposed School Budget for 1967-68, p. 45.

[3] Ibid., pp. 103-106.

Instructional Materials - General Coordination (subfunction code 51500); "A" budget, $29,486; "B" budget, $4,800. Total, $34,286, for salary and travel of the Director of Educational Media. --This position will function as the coordinator of the school system library services, the audio visual and television service, classroom supplies, textbooks, supplies for shops, laboratories, and helping teachers. The coordinative effort implies direction of the service function and budget making in support of all subfunctions of the instructional program of the Fairfax County School System except special education. The related subfunctions are shown in Table 6 for a concise view and to provide an example of the budget format. The method employed to derive the budgeted amount for classroom supplies, account 1156, subfunction 51505, shown in Table 6, is explained in the justifying remarks of the Fairfax County School Budget.

> [The] present basic allocation for classroom supplies is $2.50 per pupil with additional allowances for new schools and special education. Many requests are received each year from individual schools and from the general public at our public hearings for increased allocation for instructional supplies. In order to meet this need an increase in our basic allocations is proposed as indicated below.

Basic allocation (average):

Elementary	55,200 pupils @ $2.50	$138,000
Intermediate	18,600 pupils @ $3.00	55,800
Secondary	32,500 pupils @ $4.00	130,000
		$323,800

Allowance for new schools:

Elementary	5 schools @$1,000	$ 5,000
Intermediate	1 school @$1,500	1,500
Secondary	2 schools @$3,000	6,000
		$ 12,500

TABLE 6

FAIRFAX COUNTY SCHOOLS INSTRUCTIONAL MATERIALS BUDGET FOR 1967-68

	A Request	B Request	Total
51500 General Coordination:			
0500 Administrative Staff	$ 15,074	$	$ 15,074
0800 Clerks	11,412		11,412
1204 Travel	3,000	4,800	7,800
Subtotal	$ 29,486	$ 4,800	$ 34,286
51501 Central Library Services:			
Salaries & Summer Procurement	63,283	26,726	90,009
51502 School Library Service:			
Salaries and Materials Segregated by Elementary, Intermediate, and Secondary	1,663,305	71,943	1,735,248
51503 Audio TV Services:			
Salaries for Supervisor, Resource Teachers, Technicians and Clerks, Costs of Maps, Globes, Audio-visual supplies, graphic production & film	389,324	98,139	487,463
51505 Classroom Supplies:			
0501 Administrative Staff		10,854	10,854
0601 Specialist		18,696	18,696
0801 Clerks		9,480	9,480
1156 Classroom Supplies	304,655	46,485	351,140
Subtotal	$ 304,655	$ 85,515	$ 390,170
51506 Textbooks:			
2007 Textbooks	453,400	59,633	513,033
51507-51513 Supplies--Shops & Labs.			
1156 Industrial Arts	56,725		56,725
1199 Vocational	45,800	600	46,400
1156 Home Economics	37,800	4,250	42,050
1199 Science	103,500		103,500
Subtotal	$ 243,825	$ 4,850	$ 248,675
51516 Helping Teacher Supplies:			
1199 Helping Teacher supplies	10,000		10,000
51599 Cost of Scales:			
0004 Civil Service		15,983	15,983
0004 Teacher Scale		97,877	97,877
Subtotal		$113,860	$ 113,860
Total Instructional Materials:	$3,157,278	$465,466	$3,622,744

Source: Superintendent's School Budget for 1967-68, pp. 52-54.

Allowance for second year schools:

Elementary	6 schools @ $5.00	$ 3,000
Intermediate	1 school	800
Secondary	1 school	1,500
		$ 5,300

Allowance for major additions:

$2.00 per pupil increase in capacity

Elementary	720 pupils @ $2.00	$ 1,440
Secondary	1,300 pupils @ $2.00	2,600
		$ 4,040

Additional Allowance for special education:

1,100 pupils @$5.00	$ 5,500
	$351,140[1]

Textbooks are procured and distributed free of charge to elementary students and rented to intermediate and secondary school students through a textbook fund.[2] The amount funded in this school operating budget is transferred to the textbook fund after budget approval.

Other Instructional Costs (subfunction codes 51601, 51602, 51603, 51605, and 51608 through 51610); "A" budget, $146,240; "B" budget, $54,850. Total, $201,090, for science institutes, sabbatical teachers' leave, commencement diplomas, fire control school, Humanities Institute, summer reading, and library.--These activities are not part of the regular instructional program but are related only because they are fully or partially conducted at Fairfax County expense.

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[1] *Ibid.*, p. 55.

[2] The textbook fund is a requirement of the State of Virginia because of special "in kind" subsidization. Local contributions are deducted from annual funds furnished by the state, as per Harrison interview.

The science institutes are additional studies conducted by a member of a university staff and members of the local school staff in a noncredit tuition-free program for academically talented high school students. Budgeted funds are based on prior-year expenditures. A similar arrangement is made for senior high school students interested in greater depth study of the humanities in the regular school schedule.

Sabbatical leave is provided for selected experienced teachers for periods up to one year. These teachers are subsidized at one-half salary while they are engaged in advanced study.

The fire control school is a joint state and local financing arrangement for training courses for county firemen.

The summer reading program provides remedial reading instruction for students with specific reading inadequacies. This amount replaces a Federal subsidy for the same program which ceased the previous year.

The summer library program finances the salaries of librarians to keep the elementary school libraries open at limited and specific times during the summer.

Coordinate Activities (Major Activity Code 52000)

This major budget category includes the services and costs in the areas of health, compulsory attendance, civil defense and safety, and the school lunch program. These four subfunctions, and twelve sub-subfunctions, are representative activities which are important to the overall school

system but are not part of the instructional program. These subfunctions, which are identified in the succeeding paragraphs, are coordinated by the Assistant Superintendent for School Services (subfunction code 52207).[1]

Health (subfunction code 52101); "A" budget, $20,123, for attendants' wages and first-aid kits.--The attendants work in the centers for training the physically handicapped students. The other contributions by Fairfax County to the health program are the physicians, dentists, and school nurses whose salaries and travel expenses are costed in the county health department budget. The maintenance of first-aid kits in the schools and school buses constitute an expense of the school system health program.

Attendance Services (subfunction code 52201); "A" budget, $25,470; "B" budget, $6,360. Total, $31,830, for the salaries of attendance officers and clerks.--All travel, supplies, and other expenses are absorbed in the general administration expenses of the school administration. The budget is based on prior-year expenses and current wage scales.

Civil Defense and Safety (subfunction code 52301); "A" budget, $9,684; "B" budget, $9,240. Total, $18,924, for engineers' salaries and travel expenses.--The safety engineer functions as a liaison between school employees and pupils and Fairfax County and community agencies in the Safety and Civilian Defense Program. The budget cost is based on current civil service scales.

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[1] Superintendent's Proposed School Budget for 1967-68, pp. 69-72.

School Lunch Program (subfunction code 52401); "A" budget, $169,400; "B" budget, $293,526. Total, $462,926, for salaries, wages, and travel expenses.--The entire cost of the school lunch program to the county school system is represented in this subfunction. Subfunction code 58301, Federal school lunch, in the amount of $600,000 is budgeted separately in the School Services fund, which receives a Federal subsidy based on the actual number of lunches served.[1]

Pupil Transportation (Major Activity Code 53000)

This major budget category is responsible for providing free school bus transportation for all pupils in Fairfax County who live more than one mile from the nearest school. Daily transportation is provided for more than 50,000 pupils in 504 buses at slightly more than five cents per student per trip. There are three subfunctions and sixteen sub-subfunctions within this major budget category, which represents the cooperative administrative efforts of the Director of Transportation, the school principals, and the Supervisor of Special Education.[2] The principal budgeting and controlling tasks are the responsibility of the transportation director and his supervisory staff who base the budget request on past performance and anticipated student enrollment. The subfunction activities are defined in the succeeding paragraphs.

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[1] Ibid., pp. 103-105.

[2] Ibid., pp. 73-75.

Fleet Supervision (subfunction code 53101); "A" budget, $72,356; "B" budget, $6,360. Total, $78,716, for salaries, wages, and travel expenses. --This subfunction carries supervisory costs, gas truck drivers' wages, clerks' wages, and administrative travel costs which are based on civil service salary and wage scales.

Bus Drivers (subfunction code 53102); "A" budget, $958,703; "B" budget, $43,403. Total, $1,002,106, for wages and contracted service expense. Bus drivers are of three types: full-time drivers, part-time working mothers, and, in a few cases, qualified senior high school boys. As a result of this condition the wages are somewhat below the civil service scale. The budget is based on past experience of $500 per year per driver for late activity buses, a total estimated cost of $16,650 per year for trips to the three county vocational centers, and the prior year's costs per normal trip.[1]

Bus Operation and Maintenance (subfunction code 53199); "A" budget, $575,242, for county garage payments, liability insurance, and bus replacement costs. --The county garage payments are transfer priced at an average estimated cost of $918 per bus per year for gasoline, oil, grease, tires, tubes, parts, and labor. It also includes the expense of repair trips on the road for disabled equipment. The liability insurance is the pro rata cost of the total automobile liability premiums. Buses are replaced after

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[1] Spirt interview.

twelve years' use, and replacement costs estimated at $5,200 per bus are charged to this subfunction. The increase in the bus fleet is budgeted as an expenditure to the School Capital Outlay fund amounting to $161,200 for school year 1967-68.[1]

Operation of Plant (Major Activity Code 54000)

> This budget category provides for operating the buildings and grounds in which the school program is conducted. It operates through two major divisions: the custodial and building operation service and the division of supply. The functions of procurement, warehousing, inventory, and distribution of supplies and equipment and the operation of all motor vehicles other than school buses are included in this budget category.[2]

There are eight subfunctions and twenty-three sub-subfunctions included within this major budget category.[3] The subfunctions are described in some detail in the paragraphs that follow.

Plant Supervision (subfunction code 54101); "A" budget, $78,628, for salaries and travel expense.--The custodial and building engineer services are administered and budgeted by a Supervisor of School Plant Operation and his staff and coordinated through the Assistant Superintendent for School Services, subfunction code 50207. Budgets are based on prior-year expenditures plus engineering cost factors.[4]

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[1] Superintendent's Proposed School Budget for 1967-68, p. 109.

[2] Ibid., p. 77.

[3] Ibid., pp. 71-81.

[4] Spirt interview.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible][1]

[illegible][2] [illegible]

[illegible]

[illegible][3]

[illegible][4]

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[1] [illegible]

[2] Ibid., p. [illegible]

[3] Ibid., pp. [illegible]

[4] Ibid. [illegible]

Custodians (subfunction code 54102); "A" budget, $3, 939, 521; "B" budget, $184, 140. Total, $4, 123, 661, for wages, overtime, and custodial supplies. --Custodians are allocated to each school facility on the basis of one for each 12, 000 square feet of floor space in elementary schools and one for each 14, 000 square feet in intermediate and secondary schools. Individual school security is part of this annual budget, as are the additional maintenance improvements resulting from having two custodians per facility on duty from 11 p. m. to 7 a. m.

Public Use of Buildings (subfunction code 54103); "A" budget, $15, 000, for additional custodial wages. --This amount is estimated from costs experienced as a result of previous use of the facilities by youth groups in nonschool activities.

Utilities (subfunction code 54103); "A" budget, $1, 527, 274; "B" budget, $34, 532. Total, $1, 562, 806, for fuel, telephone, electricity, gas, water, sewer, and refuse service. -- The budget is based on recent cost experience modified by expected price changes. Additional telephone facilities and security lighting have been requested for school buildings. This request is based on engineering estimates reflected in the "B" budget.

Supply Administration (subfunction code 54301); "A" budget, $34, 626, for salaries and travel expenses. --This subfunction is newly organized under a Director of Supply whose responsibility encompasses procurement, distribution service, and the textbook service. He budgets and accounts for all teaching materials and their distribution; all textbook

receipts and distribution; and all Federally supported supply expenditures and special program inventories. This position is functionally responsible to the Assistant Superintendent for School Services.

Purchasing and Inventory Management (subfunction code 54302); "A" budget, $54,772; "B" budget, $26,508. Total, $81,280, for salaries and inventory audit expenses. --This subfunction performs the purchasing and inventory tasks and maintains current catalogs and tables of allowances for each school facility and special program.

Warehouse and Distribution Branch (subfunction code 54303); "A" budget, $189,812, for salaries, wages, and overtime expenses. --This branch is responsible for the maintenance of central warehouse facilities and operation of a coordinated county-wide distribution service for all supplies, equipment, and textbooks on a twelve-month basis. Part of its wages are paid for by the transfer of funds from the School Textbook fund.[1]

Operation of Motor Vehicles (subfunction code 54401); "A" budget, $152,750, for the costs of operation and maintenance of vehicles. --This budget item is based on actual costs for 1965-66 plus a growth factor. The method of expense allocation is as follows:

46 automobiles @ $400	$18,400
180 trucks, 1-ton or under, @ $475	85,000
44 trucks, over 1 ton, @ $525	23,100
4 trailers @ $35	140
35 ground vehicles, tractors, and mowers @ $300 . .	10,500
Total	$137,140[2]

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[1] Superintendent's Proposed School Budget for 1967-68, pp. 79, 114

[2] Ibid., pp. 79-81.

This includes the cost of gasoline, oil, tires, parts, and labor payments to the county garage. The remaining cost is attributed to liability insurance for the automotive equipment.

Maintenance (Major Activity Code 55000)

The functional responsibility and decision-making authority rest with the Assistant Superintendent for School Services, subfunction code 50207. The annual budget describes his responsibilities in this activity as follows:

> Maintenance to keep the school plant and its equipment in good physical condition. This includes preventative maintenance and repairs to buildings and grounds and all mechanical systems attendant thereto; it includes repair and replacement of furniture and equipment and the replacement of worn out motor vehicles. . . . /The/ maintenance of buildings and grounds reflects price increase in supplies and materials and the cumulative effect of unsolved maintenance problems over the past several years.[1]

There are four subfunctions and thirty-two sub-subfunctions included in this major functional activity.[2] The subfunctional categories follow.

Maintenance Supervisor (subfunction code 55101); "A" budget, $127,308; "B" budget, $12,775. Total, $140,083, for salaries and travel expenses of supervisors and staff.--The supervision is divided into four functional divisions:

> 1. Mechanical maintenance--plumbing, heating, electrical, motor maintenance, fire alarm and clock control, refrigeration, public address systems and language laboratory repair.

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[1] Ibid., p. 83.

[2] Ibid., pp. 87-88.

2. Building trades--carpentry, painting, roofing, masonry, glazing, fire extinguisher repair and furniture repair.
3. Business machines and audio visual equipment.
4. Grounds--playground equipment, asphalt, concrete, heavy equipment operation and repair, ano small gasoline motor repair.

In the budget categories for this major activity the functional separation and costs cut across divisional supervisory lines, complicating the accounting control and planning performance.[1]

Building Maintenance (subfunction code 55201); "A" budget, $1,690,683; "B' budget, $121,134. Total, $1,811,817, for wages, overtime, supplies and materials, and pest control.--The budget reflects a readjustment over prior-year expenditures because of anticipated increases in material costs and a change in plans to reduce the painting cycle of buildings.

Grounds Maintenance (subfunction code 55301); "A" budget, $371,546, for wages, supplies, and equipment repair costs.--The budgeted amount is based on the previous annual budget and reflects a cost reduction of $19,175 to offset increases in the other subfunctional costs of the maintenance activity.

Equipment and Furniture Maintenance (subfunction code 55401); "A" budget, $952,033; "B" budget, $29,124. Total, $981,157, for wages, uniforms, travel supplies, equipment repair, and replacement costs.--The expenditures for repair to equipment have increased sharply because of equipment age. Equipment replacement estimates reflect increased procurement costs. The replacement proposal in the 1967-68 budget is as follows:

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[1] Watts interview.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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[1] [illegible]

> . . . With a total of some \$12 to \$14 million worth of equipment in the school system and an average life of 10 years or less for each piece of equipment and furniture it would be reasonable to expect replacements of between \$1 million and \$1-1/2 million annually. If we are to avoid continued drain upon our bond funds for providing equipment which cannot be replaced under our existing schedules of replacement we must significantly increase our allocations for replacement.[1]

The operational cost of motor vehicles, other than school buses, is budgeted under subfunction 54401; replacement costs are an increment of this subfunction.

Fixed Charges(Major Activity Code 56000)

> The functions included under this section of the budget are insurance, employee benefits, and rent. These are functions which are not allocable to any discrete segment of the school program or activity but cut across many other functions of the school system. No employees are budgeted here but these expenditures represent part of the cost of personal services throughout the budget.[2]

There are three subfunctions and ten sub-subfunctional cost codes budgeted within the major activity expense category which are the dual responsibility of the Assistant Superintendents for Finance and Personnel to account for and control.[3] The subfunctions follow in the succeeding paragraphs.

Insurance (subfunction code 56101); "A" budget, \$408,301, is for insurance analysis, workmen's compensation, fire and boiler insurance,

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[1] Superintendent's Proposed School Budget for 1967-68, p. 87.

[2] Ibid., p. 89.

[3] Ibid., pp. 89-91.

surety bond, hospitalization, and county life insurance. --The county insurance consultant is employed to analyze proposals, prepare bid specifications, and review existing programs. Fire and boiler insurance covers all county school facilities as well as builders' risk policies for new construction projects. Workmen's compensation is provided under a county self-insurance plan, whereby the county specifies the annual charge made to the school board. Surety bond coverage is extended to all school board employees on a blanket bond prepaid tri-yearly; special bonds required for certain officials are procured annually. The Group Hospitalization plan is optional for all employees and the School Board budgets for one-half of the premiums. All educational and clerical employees are required to participate in the state group life insurance plan. The employer portion of the plan is paid from state funds, while county funds defray the employer portions of a similar plan for employees who are ineligible for the state plan.

Retirement (subfunction code 56201); "A ' budget, $588, 150; B" budget, $40, 018. Total, $628, 168, is for social security and county retirement benefits. --All employees, other than educational and clerical personnel, can participate in the county retirement system for which the school board is annually charged a specific amount. Only the employer contributions to social security insurance for those employees who are not eligible for the state retirement plan are paid by the school board.

Rent (subfunction code 56301); "A" budget, $143, 372; B" budget, $26, 460. Total, $169, 832, is for rent of land, buildings, and equipment. --

The rent is for one parcel of land on which a maintenance shop is located. The budgeted funds for building rental are contingent upon temporary school classroom or office space requirements for the prior year's operation. Equipment rental costs are for office copying machines used in the administrative offices and data processing equipment used for both administrative functions and vocational training in specific intermediate and secondary schools. The 1401 computer is included as a fixed charge under contract at a 60 per cent discount for use in instructional programs.[1]

School Capital Outlay (Major Activity Code 107-110)

This budget category is segregated from the School Operating Budget because it is specifically designed to delineate the capital improvements expenditures for providing additional capital equipment, library books, and furniture for newly constructed schools and additions. School buses procured for use in new schools are also funded in this category. Improvements to existing buildings and grounds are considered capital increases and therefore appear as expenditures.

The budgeted revenue for this activity, $1 million, is derived from a carry-over balance from the 1965-66 school year and the transfer from the Fairfax County General Fund.[2]

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[1] Tankard interview.

[2] Harrison interview. See also Fairfax County, A Plan for Orderly Growth, Fairfax County, 1968-72, December, 1966, pp. 2-6.

[illegible]

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[illegible]

[illegible]

[illegible]

[illegible]

The budgeted expenditures for 1967-68 are as follows:

1.	School buses (31)	$ 161,200
2.	Library books	244,755
3.	Improvements to buildings and grounds	100,000
4.	Equipment and furniture	494,045
	Total	$1,000,000[1]

The new bus request is based on the anticipated pupil growth considered in conjunction with completed school construction. Although library books for new schools were previously purchased from bond funds, the books necessary to provide standard library collections and to satisfy the requirements of accreditation for new schools, and additions must be financed by Fairfax County school allocations. The improvements to buildings and grounds include planned minor alterations--new wiring, grading, and temporary classrooms.

The School Services Fund (Major Activity Code 58000)

This fund serves a multiple purpose in the budgeting and accounting functions of the Fairfax County School Administration.[2] It acts as a clearing fund for the receipt of that portion of Federal aid, $92,100, under Public Law 89-10, Title III, designated for the operation of the pilot kindergarten program budgeted in the School Operating fund,[3] subfunction code 51004.

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[1] Superintendent's Proposed School Budget for 1967-68, p. 109.

[2] Ibid., pp. 103-106.

[3] Ibid., p. 104.

Other clearing accounts, subfunction code 58400, provide for various self-supporting activities, such as collections for special projects, student activity trips conducted by individual schools, and the summer cannery project operating annually from June to September at Herndon, Virginia. Equipment is purchased by PTA groups, musical groups, and similar organizations and is donated to the school board for allocation to individual schools. The anticipated purchases allocation, $110,000, as compared with receipts from local school organizations, $172,025, indicate that funds often carry over from preceding years until purchase decisions have been made by the contributing groups.

The other purpose of the School Services fund is to set up the budget for revenue and expenditures for the following bilateral programs.

Tuition summer school (activity code 58100) includes the operational cost of regular credit and noncredit "makeup" courses, conducted at the intermediate and secondary levels, to tuition receipts and state assistance funds. Budget: $277,352.

General adult courses (activity code 58202) relates the tuition charges and nominal state reimbursement to the teacher salary expense for high school credit courses offered to adults at night in several secondary centers. Budget: $115,928.

Apprenticeship training (activity code 58203. This activity comprises part-time class instruction for apprentices and on-the-job trainees in industrial trades. This is a four-year curriculum. Budget: $37,325.

Adult distributive education (activity code 58204). This training program for adults engaged in merchandising, warehousing, or real estate is self-supporting through tuition fees and state and Federal funds. Budget: $27,090.

Trade extension (activity code 58206). Classes are provided to increase knowledge and skills of persons already employed in the trade and industrial occupations. This program is fully sustained by tuition fees. Budget: $60,194.

Federal lunch program (activity code 58301). The Federal Government subsidizes the school lunch and milk programs on the basis of number of lunches served. The funds are received by the central office and distributed to the respective school cafeterias. Budget: $600,000.

Neighborhood youth corps (activity code 58502). This function includes the expenses involved in the part-time employment of youngsters with a limited income for the purpose of meeting routine expenses while completing their high school education. Budget: $93,113.

Secondary special education vocational program (activity code 58506). The school board operates a program to teach work skills to mildly retarded high school students. One-third of the cost of this program is defrayed by the School Operating fund, while the remainder comes from state and Federal rehabilitation funds. Budget: $120,000.

Preschool program (Head Start) (activity code 58505 and 58507). The preschool training for kindergarten-age children of a culturally

disadvantaged background is supported by the Economic Opportunity Act. When the state kindergarten program goes into effect in 1968, this program will be integrated and greatly expanded.[1] Budget: $262,000.

Bailey's project - Title I, ESEA (activity code 59103). This program offers special assistance to culturally disadvantaged children at the Bailey's Crossroads Elementary School. It is fully subsidized by resources under the Elementary and Secondary Education Act of 1965, Title I, Programs for the Disadvantaged. Budget: $50,000.

Planning grant programs under P. L. 89-10, Title III (activity code 59300). Public Law 89-10, Title III, authorizes school districts to obtain funds for the planning and/or operation of centers to provide supplementary educational and/or cultural services. This specific activity is a planning function to develop innovative programs serving both public and nonpublic school children. Budget: $300,000.

Other expenditures related to education are also budgeted, for obvious reasons, within the School Services fund. These include school concerts, basic adult education, wages for extracurricular activities, honoraria for planetarium lectures, March-of-Dimes contributions, post-high-school supplies account, and the Federal research grant - Fairfax (City) plan.

The anticipated revenue is divided into five classifications: (1) Commonwealth - $140,112; (2) Federal aid - $1,819,276; (3) tuition - $383,287; (4) local school organizations - $172,025; and (5) transfer from School Operating funds, $126,000. The school board officials determine the

---

[1] Jones interview.

extent of programs to be budgeted within this fund category and the amount of Federal and Commonwealth support which the programs can quality for. They interface these programs with related functional categories provided in the School Operating fund to arrive at the supplementary revenue that must be provided from local sources. Budgeted expenditures are based on previous funding and cost experience as well as fragmentary planning.[1]

The Textbook Fund (Account No. 114-116)

The school budget explanation of this fund is:

> The state requires that textbook rental programs be operated through a separate fund. The school board's contribution to the program of free textbooks for elementary schools and a supplement to the program of rental of textbooks for intermediate and high school is $513,033 for 1967-68. Of this amount $48,012 will be transferred back to the School Operating Fund to pay the salaries of personnel employed in the handling of textbooks. . . .[2]

Textbooks are provided to elementary students of Fairfax County at no charge, to intermediate students for a rental fee of $8.00 per year, and to secondary school pupils for $10.00. Books lost are replaced by the student at cost. The budget for new procurement is based on changes to texts, enrollment increases, and replacement costs. It is broken down by school categories: elementary, $343,681; intermediate, $159,834; and secondary, $280,448. The budget also says:

> . . . Under contractual agreement many of the present text prices have not changed over the last six years. This year we are due for a major adoption change, and preliminary studies of the

---

[1] Harrison and Tankard interviews.

[2] Superintendent's Proposed School Budget for 1967-68, pp. 114-115.

> current copyright prices of the present texts indicate that we may expect an overall price increase of at least 18%. Texts that are not purchased under contract, represent at least 50% of the current expenditures, and there has been a substantial annual price rise in this area with little assurance that this trend will not continue.[1]

Since the procurement, issue, and control of textbooks is centralized, the expenditures are categorized by book procurement, handling expense, and book renovation expense which totals $1,014,671. The offsetting revenue is classified as rental fees - $408,000; private purchases - $141,650; and transfer from the School Operating fund - $513,033, or a total of $1,062,683.[2]

The Budget Interface

The interface which exists between the funds analyzed in the previous portions of this chapter and the two School Board funds, the Federally supported special school construction funds, the school debt service and a Pupil Scholarship fund is outlined in the Fund Summary of the Fairfax County School Administration, Table 7.

The total county contribution to the operation of the school system is as follows:

School operating fund	$65,109,305
School capital outlay	1,000,000
School debt service	9,037,736
Total	$75,147,041

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[1] *Ibid.*, p. 115.

[2] *Ibid.*, p. 114.

TABLE 7

FUND SUMMARY - FAIRFAX COUNTY SCHOOL ADMINISTRATION

Categories	Budget 1967-68
Beginning Balance (from 1966-67)	$ 2,306,856
Receipts:	
State	15,600,956
Federal	9,659,258
City of Fairfax[a]	3,699,656
County General Fund	48,481,812
Sale of Bonds	17,500,000
Other	1,408,637
Total Receipts	$96,350,319
Total Funds Available	98,657,175
Expenditures:	
School Operating Fund	$64,470,272
School Scholarship Fund[b]	343,575
School Services Fund	2,548,875
School Construction Fund (1963)	673,265
School Construction Fund (1965)	16,384,965
Special School Construction Funds	1,196,718
School Capital Outlay Fund	1,000,000
School Debt Service Fund	9,037,736
Total Expenditures:	$96,670,077
Ending Balance	$ 1,987,098

Source: Superintendent's Proposed Budget for 1967-68, p. 117.

[a] The City of Fairfax, Virginia, pays a specified amount annually to Fairfax County for the provision of full county service to educate its pupils instead of operating an autonomous system.

[b] Any pupil eligible to attend the county schools but who prefers to attend some other school, nonsectarian and meeting state standards, may apply for a tuition grant of $250 per year for elementary or $275 for high schools.

School construction is funded by bond sales over the construction period, as authorized by a referendum vote of the citizens of Fairfax County and Federal aid funds. The planning and budgeting for this construction is a joint endeavor of the school and county officials, dependent upon the prediction of school enrollment and anticipated revenue to Fairfax County through county taxes and Federal and state support.[1]

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[1] Harrison and Spirt interviews.

CHAPTER IV

PPB IN THE FAIRFAX COUNTY SCHOOL SYSTEM

Budgeting may be conceived as a process for systematically relating the expenditure of funds to the accomplishment of planned objectives. The implication that planning is the only function that must be served by a budget system was made by the Superintendent of the Fairfax County Schools, Dr. Earl C. Funderburk, in his preface to the proposed school budget for 1967-68:

> The program which has been distilled from all of our plans and hopes and which has been finally incorporated for a budget for 1967-68 is one which provides for some progress in all areas. Although it falls short of what we would like to do, it will permit us to maintain present levels of service, meet the challenges of growth, and take measured steps toward meeting some of our most pressing needs.[1]

In the past, two other functions have been given priority over the planning function in governmental budgeting: the management of operational activities and the control of spending. Dr. Robert N. Anthony, of the Office of the Secretary of Defense, specifies three distinct administrative processes inherent in PPB: strategic planning, management control, and operational control.

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[1] Superintendent's Proposed School Budget for 1967-68, p. ii.

[illegible]

[illegible]

[illegible]

> [illegible]

[illegible]

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[1] [illegible]

> Strategic planning is the process of deciding on objectives of the organization, on changes in these objectives, on the resources used to attain these objectives, and on policies that are to govern the acquisition, use, and disposition of these resources.
>
> Management control is the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives.
>
> Operational control is the process of assuring that specific tasks are carried out effectively and efficiently.[1]

Each budget system, simple or complex, involves plans, management, and control functions. These functions may not be distinct or orderly, but may be conceptually analyzed individually. Allen Schick, Assistant Professor of Political Science at Tufts University, views these three functions in the framework of PPB.

> . . . Planning involves the determination of objectives, the evaluation of alternative courses of action, and the authorization of select programs. Planning is linked more closely to budget preparation, but it would be a mistake to disregard the management and control elements in budget preparation or the possibilities for planning during other phases of the budget year. Clearly one of the major aims of PPB is to convert the annual routine of preparing a budget into a conscious appraisal and formulation of future goals and policies. Management involves the programming of approved goals into specific projects and activities, the design of organizational units to carry out approved programs, and the staffing of these units and the procurement of necessary resources. The Management process is spread over the entire budget cycle; it is the link between goals made and activities undertaken. Control refers to the process of binding operating officials to the policies and plans set by their superiors. Control is predominant during the execution and audit stages, although the form of budget estimates and appropriations is determined by control considerations.[2]

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[1] Robert N. Anthony, Planning and Control Systems: A Framework for Analysis (Boston: Harvard University Press, 1965), pp. 16-18.

[2] Allen Schick, "The Road to PPB: The Stages of Budget Reform," Public Administration Review, December, 1966, p. 244.

> Strategic planning is the process of deciding on objectives of the organization, on changes in these objectives, on the resources used to attain these objectives, and on the policies that are to govern the acquisition, use, and disposition of these resources.
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> Planning involves the determination of objectives, the evaluation of alternative courses of action, and the authorization of select programs. Planning is linked most closely to budget preparation, but it would be a mistake to disregard the management and control elements in budget preparation or the possibilities for planning during other phases of the budget year. Clearly, one of the major aims of PPB is to convert the annual routine of preparing a budget into a conscious appraisal and formulation of future goals and policies. Management involves the programming of approved goals into specific projects and activities, the design of organizational units to carry out approved programs, and the staffing of these units and the procurement of necessary resources. The management process is spread over the entire budget cycle; ideally, it is the link between goals made and activities undertaken. Control refers to the process of binding operating officials to the policies and plans set by their superiors. Control is predominant during the execution and audit stages, although the form of budget estimates and appropriations often is determined by control considerations.[2]

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[1] Robert N. Anthony, *Planning and Control Systems: A Framework for Analysis* (Boston: Harvard University Press, 1965), pp. 16-18.

[2] Allen Schick, "The Road to PPB: The Stages of Budget Reform," *Public Administration Review*, December, 1966, p. 244.

Strategic Planning

The function of planning on a program basis must begin with a determination of acceptable programs. Henry Rowen has suggested a possible program structure for education based on the present education budget format similar to that of the Bureau of the Budget. The proposal, shown in Table 8, emphasizes some of the major choices that are faced in program structuring.

TABLE 8

A POSSIBLE PROGRAM FOR EDUCATION

	1966	1967	1968	1969	1970
Preschool					
Primary Education					
Secondary Education					
College Preparatory					
Vocational					
Higher Education					
Junior College					
College					
Graduate					
Postgraduate					
Adult Education					
Continuous General (Liberal) Education					
Continuous Vocational (Professional) Education					
Retraining					
Library Services					
Research and Development					

Source: Rowen speech.

Mr. Rowen explains that this grouping flags:

> . . . preschool versus secondary versus higher education; and within each of these categories it flags choices among types of education. Not shown is a possible finer breakdown in which such program elements as facilities, books, numbers of teachers, and so forth, would be shown.
>
> At this point you might wonder how a programming system should relate Federal Government programs in a given field to our total national effort in that field including the efforts of other governments and the private sector. I think that it is important for a programming system in a field such as education to include both Federal programs and total national efforts--with perhaps more detail on those programs for which we are directly responsible. (Incidentally, we face this problem in Defense programming too. There are few defense contingencies we plan for that don't involve allied forces. We don't control their programs but we need to take account of them in our plans.)[1]

The present budget for the Fairfax County School System must be related in greater detail by a conceptual program structure as proposed in Table 9. The preschool category should be divided into "Head Start" and kindergarten. Subdivisions in these subprograms consist of teachers' salaries, consultants' fees, supplies, books and reference materials, printing, and travel expenses. The item of pupil transportation is noticeably absent from the present budget. The criteria for student transportation must be considered separately and alternatives should be considered because of the age group concerned. In the Head Start program, there is a provision for student bus facilities and since the same age group is involved in the kindergarten program, similar facilities should be provided. The morning and noon lunch service is a singular element of the Head Start program.

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[1] Rowen speech.

[illegible]

[illegible]

[illegible]

The present [illegible] of the Pacific County School System [illegible]

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[1] [illegible]

TABLE 9

A PROPOSED PROGRAM FRAMEWORK FOR THE FAIRFAX COUNTY SCHOOL SYSTEM

Programs	1967-68	1968-69	1969-70	1970-71	1971-72
Administration					
Board of Education					
Superintendent of Schools					
1) Associate Superintendent					
Personnel Assistant					
Finance Assistant					
Budgeting					
Accounting					
Auditing					
Central Services					
School Services Assistant					
Maintenance - Buildings and Grounds					
Supply					
Transportation					
Pupil					
Staff					
School Lunch Program					
Construction					
Administration Assistant					
School/Community Relations					
Attendance Services					
Area Directors					
2) Associate Superintendent for Instruction					
Instructional					
Preschool Instruction					
Kindergarten[a]					
Supervision					
Consultant Fees					
Teachers					
Aides					
Supplies					
Text and Reference Materials					
Head Start					
Supervision					
Teachers					
Aides					

TABLE 9--Continued

Programs	1967-68	1968-69	1969-70	1970-71	1971-72
Supplies					
Texts and Reference Materials					
Meal Catering Service					
Pupil Transportation					
Elementary Instruction					
Administrative					
Principals, Associates, Assistants					
Clerical					
Area Supervisors					
Directors and Supervisory					
Office Supplies					
Printing					
Travel					
Testing Service					
Reference Books and Materials					
Equipment and Furniture					
Mathematics					
Supervision					
Teachers					
Helping Teachers					
Supplies					
Travel					
History and Geography					
Supervision					
Teachers					
Supplies					
Teaching Materials					
Physical Education and Health					
Music					
Art					
Science					
Foreign Language					
Reading					
Supervisors					
Teachers (Standard)					
Teachers (Remedial)					
Special Teachers					
Supplies					
Travel					

TABLE 9--Continued

Programs	1967-68	1968-69	1969-70	1970-71	1971-72
Speech					
Supervisors					
Therapists					
Supplies					
Travel					
Psychological Service					
Psychologists, Psychometrists and Professional Staff					
Supplies					
Travel					
Gifted Instruction					
Teachers, Specialists					
Travel					
Learning Problem					
Visually Handicapped					
Hearing Impairments					
Homebound Instruction					
Teachers					
Supplies					
Travel					
Intermediate Instruction[b]					
Secondary Instruction					
Administration					
Director of Secondary Studies					
Supervision					
Clerical					
Travel					
Principals, Associates, Assistants					
Clerical					
Supplies					
Postage					
Travel					
Guidance					
Testing					
Textbooks					
Driver Education					
Teachers' Supplies					
Special Reading					

TABLE 9--Continued

Programs	1967-68	1968-69	1969-70	1970-71	1971-72
Instructional - Vocational					
Director					
Clerical					
Travel					
1) Industrial Education					
Supervisor					
Teachers					
Textbooks					
Supplies and Equipment					
2) Industrial Arts					
3) Distributive Education					
4) Business Education					
5) Education for Mildly Retarded					
Instructional - College Preparatory					
Director					
Clerical					
Travel					
1) Social Studies					
Supervision					
Teachers					
Supplies					
Textbooks					
2) English					
3) Science					
4) Mathematics					
5) Foreign Language					
6) Art					
7) Music					
8) Health and Physical Education					
9) Humanities Institute					
10) Science Institutes					
Adult Education					
General Adult Courses					
Apprenticeship Training					
Adult Distributive Education					
Trade Extension Courses					
Fire Control School					

TABLE 9--Continued

Programs	1967-68	1968-69	1969-70	1970-71	1971-72
Summer Cannery - Herndon					
In-Service Teacher Training					
Special Programs					
Neighborhood Youth Corps					
Bailey's Project - Title I, ESEA					
Athletic Events (Extracurricular)					
Sabbatical Leave					
Mentally Handicapped					
Physically Handicapped					
Research and Information					
Administrative Staff					
Technical Staff					
Clerical					
Travel					
Computer Training Program					
Planning Grant in Programs (P. L. 89-10, Title III)					
Kindergarten[a]					
Library, Audio and TV Service Program					
Central Library Service					
School Library Services					
Preschool and Elementary					
Intermediate					
Secondary					
Summer Library Services					
Audio-Visual Aides and Television					
Supervision					
Resources Teachers					
Technicians					
Equipment					
Supplies and Materials					
Travel					

TABLE 9--Continued

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[a] The kindergarten subprogram should be included under the Research Program during the first year of pilot operation and under the preschool program in the years when it is fully operational systemwide.

[b] The Intermediate Instruction Program has not been fully listed because it closely parallels all subprograms, sub-subprograms, and functional elements of the Secondary Instruction Program.

The elementary (primary) school program could be broken down by subject matter such as mathematics, history, geography, physical education and health, music, art, science, foreign languages, reading--standard, remedial, and guidance. The school administration may want to measure elementary facilities against each other or make comparisons based on a standard. Both requirements can be accomplished simultaneously by a management information system designed to break out the incremental costs of each subject by facility. This process requires an explanation of the concepts of performance or program budgeting. Bertram Gross describes the "traditional" government approach.

> /The/ approach to the specification of operation and missions is found in the increasing efforts by government agencies to develop "performance" or "program" budgets. Traditional government budgeting has usually consisted of lists of specific inputs--manpower, equipment, and materials--and their costs, grouped in accordance with the organization and amounts receiving budgetary allocations and using inputs. Such input lists cannot by themselves give much of an idea as to the nature of the output expected to result.[1]

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[1] Bertram M. Gross, The Managing of Organizations (2 vols.; New York: The Free Press of Glencoe, 1964), p. 615.

However, program budgets are not ends in themselves but are paths to a more effective evaluation and decision-making process. Jesse Burkhead states the following in support of "listing of specific inputs":

> Program and performance concepts should facilitate the evaluation of new teaching techniques and judgments about the costs and gains from special programs such as remedial reading. This is the information that is needed by the superintendent. [1]

The speech therapists and teachers and the psychological services required for children who are gifted, homebound, visually or aurally handicapped, or who have other learning problems, are part of the normal school curriculum but may be programmed separately. In some instances these services become intangible and intermediate in nature and fall into the categories of the principal, assistant principal, and clerks. The efforts of such personnel, when assigned a price tag, cannot equitably be divided among any specific programs other than those of elementary education.

A question usually asked by the budgeteer is: How can the elementary teacher's salary be divided between all of the subjects taught at each grade level? No positive formula can be applied; however, a conceptual one can be designed. It can be assumed that the average fourth grade teacher works a forty-hour week and teaches mathematics, art, music, spelling and reading, science, physical education and health every day in a predetermined curriculum with programmed additional subjects, such as a foreign

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[1] Jesse Burkhead, "The Theory and Application of Program Budgeting to Education," Trends in Financing Public Education (Washington: National Education Association, 1965), p. 185.

Therefore, [illegible]

[illegible] makes the following [illegible] specific [illegible]

> [illegible]

The speech therapist and teacher for the [illegible] required [illegible] gifted, [illegible] or who have [illegible] problems, [illegible] contribution [illegible] may be [illegible] any specific positions other than those of classroom teacher.

A question [illegible]

[illegible] National Education Association, [illegible] language and others. The average number of hours devoted to each subject in one school month can be expressed in unit costs which are part of the total input costs for the school or the incremental portion of the aggregate expenditures for each subject in the elementary program.

In intermediate and secondary schools, the educational functions are similar to those in colleges and universities, and expenditures are more easily defined. The curricula are oriented toward college preparatory or vocational emphasis and the expenditures for specialized instruction can be allocated within these two categories.

The Adult Educational Program might include the operation of the Fire Control School, apprenticeship training, trade extension courses, and other instruction offered by the school system on a tuition basis.

Special programs are those such as the Neighborhood Youth Corps project and any other programs for the culturally deprived which are not supplementary to normal instructional programs.

The program emphasis in Fairfax County schools is on education, as the framework suggests. Administration, finance, personnel, supply, transportation, maintenance, and construction are only parts of this program. These functions are resource service control points of the total program which is measured by its outputs (the end product), as related to its inputs (the resources). Bertram Gross points out that:

> The application of the output concept to units and individuals within an organization requires a distinction between end and intermediate products.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

> [illegible]

> For the purposes of administrative analysis, the end (or final) products . . . are those which, without any further action within the organization, are available for use by the organization's clients. Intermediate products /or services/ are those which are made available by units or individuals within the organization and are ready to be used in the process of producing other intermediate products /or services/ or the organization's end products themselves.[1]

The intermediate services of the school system involve the Board of Education, the Superintendent, and the school board in the process of deciding on the school system's objectives--the approved educational programs; the resource inputs required to obtain these objectives, such as teachers, supplies, facilities, and services; and the policies that are to govern the utilization of these resources--teacher qualifications, curriculum, working hours, plant maintenance, pupil-teacher ratios, and facility capacity standards. These decisions are based on a time factor in PPB. Reece Harrill supports the time factor in his analysis of the management planning function.

> The PPB system is just a part of good management. It requires a look at the future as well as at the past and present. . . . In the past, long-range plans have frequently been concentrated within too short a period. Good planning requires a long look ahead. For most decision making, a five-year span is generally considered necessary, although to complete many programs there must be a look to completion. . . . Future operating costs resulting from capital expenditures must also be brought into the picture. Long-range plans do not have to be too refined as to the detailed cost, but total cost and quantitative data should be developed.[2]

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[1] Gross, op. cit., p. 543.

[2] Harrill, op. cit., pp. 18-22.

Planning also involves the changing of objectives based on resource availability. If teachers, facilities, or funds are not expected to be available in the quantity required, the program objectives and governing policies must be considered in a framework of alternative objectives and policies.

Harrill summarizes the tasks of administration as:

> . . . Planning, execution or direction, and control. In this context, planning, programming, and budgeting are functions of "planning. The first phase would include such subordinate tasks as:
>
> (a) Gathering as much information as is possible about the economy, the present status of things, the objectives, the needs and desires of the public.
>
> (b) Analyzing the data by filling in the missing parts. In short, it is putting the "jigsaw puzzle" of information together, and of course certain assumptions have to be made.
>
> (c) Determining needs. Many times there is a difference between what is needed and what is desired. What can be afforded also enters into consideration.
>
> (d) Establishing priorities as to needs and what can be done with the available resources. . . .
>
> (e) Choosing between alternatives--I ifferent alternatives, both as to what is to be done and how it is to be done are studied and "costed" to determine the most efficient way to accomplish the objective. . . .
>
> (f) Setting goals. The plans must be carried out and completed in accordance with a schedule for best results.
>
> (g) Decision making. This is the end result or objective of planning. . . . The basic things to be decided under a PPB system are: (1) What is to be done; (2) Who is to do it; (3) What resources will be needed; (4) How is it to be done; (5) When is it to be done; (6) What will be the benefits and effects; and (7) What will it cost?[1]

Management Control

The budget is the tool which defines the objectives and states the resource requirements in terms of people and money. Control is the method

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[1] Ibid., p. 20.

by which management ensures that the resources are obtained and used effectively and efficiently. Control does not exist until a measure is provided for its operation. The measure chosen by the PPB system is program output related to resource input. How can the output objectives of a school system best be expressed?

The prime role of output objectives derives from the fact that only by producing certain services or goods can an organization or unit thereof satisfy human interests. The output objectives provide a focal point for bringing together the diverse interests of both organizational members and consumers. Gross defines output as "the goods or services that an organization, unit, or individual makes or helps make available for use by clients."[1] Burkhead indicates the difficulty which has been experienced in defining output measurements for schools.

> . . . There are some separate activities, such as maintenance, food service, and attendance services, where it would appear that end products can also be defined with relative ease and employed as a basis for performance measurement. . . . These are auxiliary services. The important output is the educational attainment of children, very broadly defined to embrace technical skills, an appreciation of literature, art, and esthetics, and a sensitivity to human needs and relationships. . . . Few of us would be satisfied with judging school performance solely on the basis of scores on standard achievement tests, although all of us would feel that verbal and quantitative skills are important and that the schools have a major responsibility for improving such skills.
>
> The dropout rate, or its converse, the holding power of schools, is also an important measure of school performance, but again it is just one of the ways by which educational outcomes can be judged. For some high schools, . . . the proportion of graduates completing

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[1] Gross, op. cit., p. 542.

> post-high-school education is significant. For some high schools the contribution to a reduced neighborhood delinquency rate is an important test of performance.
>
> Economists, of course, would like to be able to judge schools and school programs on the basis of their contribution to lifetime earnings. Although much general information is now available on lifetime earnings, the data do not yet permit an assessment of the earnings value of language training, for example, as against social science training.[1]

The formulation of output goals in physical measurements alone is confining. Physical units provide no common denominator for comparing output with input through measures common to both. For these purposes a more refined instrument is needed: monetary measurement. There are two ways of placing a monetary value on services, which Gross states as follows:

> The first is to use some aspect of input value as imputed output value. The most common approach is to use aggregate costs. This is based upon the concept that value, after all, is "embodied cost." Or else certain costs which are beyond the control of the sub-unit might be subtracted. Sometimes labor costs will be the major or exclusive basis of the imputed output value. . . . A truly meaningful relationship between labor input and total value of output can be developed only for the sector of marketed goods and services.
>
> The second device, applicable only to intermediate, or internal, products /or services/, is to develop a system of internal pricing. . . . Thus a charge is made to all units which come to the central office for economic, engineering, or legal advice or perhaps even for lesser services in the area of duplication and repairs. . . .
>
> When the "internal price" is fixed purely on a cost basis, it amounts to nothing more than a specific method of using input value as imputed output value.[2]

The control function of PPB entails organizing the work to follow program plans. Communication throughout the organization, at all levels, must be clear and precise so that the plans will be carried out. The coordination of daily work on schedule must follow, and timely modification to

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[1] Burkhead, op. cit., p. 186.

[2] Gross, op. cit., pp. 548-49.

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[1] [illegible], op. cit., p. [illegible] [2] [illegible], op. cit., pp. [illegible]

program schedules must be effected and communicated for reevaluation by the program director or service responsibility center.[1] Usually in a school system such as Fairfax County's, the programs are determined at the superintendent or assistant superintendent level. The operating units, individual supervisors, directors, or principals must determine by a study of alternative methods the most effective way of carrying out the programs, thus linking together performance and planning.

Operational Control

"Progress Measurement" is the term used by Samuel M. Greenhouse, a member of the Administrator's Advisory Council, Veterans Administration, to relate the operational control function to PPB. He states:

> If output means only those programmatic end-products which satisfy explicit market objectives, then program fulfillment must imply that both of two conditions have occurred:
>
> 1) the output which had been planned has materialized, and
>
> 2) the output distribution which had been intended has been completed.
>
> If that is fulfillment, then progress must imply one of two questions, depending upon what stage the program happens to be in at the time when progress is measured:
>
> 1) Either how closely does the production progress match planned progress?
>
> 2) Or, how well is the output distribution proceeding, as compared with the distribution plan?[2]

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[1] A responsibility center is the locus point at which decision making and process planning are assigned functions: A control point for present and future program operations

[2] Samuel M. Greenhouse, "The Planning-Programming-Budgeting System: Rationale, Language, and Idea-Relationship," Public Administration Review, December, 1966, p. 275.

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[1] [illegible]

[1] [illegible]

In his second question, Greenhouse is referring to systems analysis, which he designates as "a bag of techniques attached to a way of approaching problems" or "the application of 'benefit-cost' analytical techniques to several areas of the PPBS anatomy."[1]

The "benefit-cost" application to operational control means the ascertainment of any benefits or penalties (costs) resulting from changing the input mix of the program in order to produce an output more efficiently, effectively, or economically. An example in the school system would be: If the expenditure of funds for grounds maintenance on a school building were reduced to provide funds for teaching one more class in algebra, what would be the incremental output change as a result of this alteration of the input mix?

Operational control is necessary for the following reason, as stated by Gross:

> At any given stage of technology, a specific combination of input factors may be the prerequisite for product /or service/ performance which meets the needs of specific clients. The setting forth /and control/ of input goals and norms, therefore, is often essential as a way of guiding an organization's activities toward the output of products with the characteristics required to satisfy defined interests.[2]

In the PPB concept of control, the investment of responsibility is as important as the function. Burkhead observes the following:

> There is also the difficult matter of the relationship between performance and organizational structure. If budgeting is to serve in its

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[1] Ibid., p. 276.

[2] Gross, op. cit., p. 576.

> traditional role as a "tool of management," administrative responsibility must be assigned for particular activities in an organizational context. Someone must be held responsible for the budget and for performance within it. Anything designated as a program must have a program supervisor. Those who are responsible for performance within the program must be aware of the units by which they are being measured and held accountable. When programs cut across organizational lines and are jointly administered, any program or performance approach encounters difficulties which are not easily resolved. But even here some kinds of measurement are not impossible.[1]

How To Apply PPB

The steps to be taken in the application of PPB or program budgeting to a school system are suggested by Burkhead.

> In the installation of a program system the first decision that must be made, for any specific school system, is a determination of the degree to which administrative structures should be altered in the interest of budget structure. If a school district has a tradition of highly centralized budgeting, as is generally the case, it would appear unwise to attempt to alter this at the outset. . . . There may be important gains from the involvement of teachers and principals in the initial stages of budget preparation. . . . Program budgeting can be a tool for either centralized management or for decentralized management. . . . The first step in the installation of a program budget system is the inventory of all activities in a school district and the development of workable definitions of program and administrative responsibility for program. The second step is the development of performance measures for each program. The third step is the introduction of a performance reporting system.[2]

George A. Shipman, Director of the Institute for Administrative Research at the University of Washington, writes that correspondence with Vincent J. Moore, Director of Budget Planning, New York State Division of the Budget, clarifies the lines of action under way in New York State and specifies the following:

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[1] Burkhead, op. cit., p. 187. [2] Ibid., p. 188.

[illegible]

[illegible]

The steps to be taken in the application of [illegible]

[illegible]

[illegible]

[illegible]

and specifies the following:

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[1] [illegible], op. cit., [illegible]

New York is following a carefully ordered set of priorities in moving from its present budgeting methods to a full program budget. The steps are:

"a) Systems design and overall initiation.

b) Securing top-level executive support and organization for planning in the line departments and central staff agencies.

c) Establishment of a strong relationship between the planning and budgeting process and the definition of program structure.

d) Definition and procurement of necessary input information for planning.

e) Defining and establishing proper output measurement units.

f) Development of a capability for considering alternative program output plans.

g) Developing combined input-output analysis techniques.

h) Preparation of coordinated, comprehensive program plan and resource allocation models.

i) Program planning."

"At present New York is between d and e." /Vincent Moore further states/:

". . . we now have the State's entire five-year capital program on magnetic tape. Extract programs enable us to take estimated capital costs or current appropriations and project estimated cash expenditures over the program period, and display the entire schedule of a capital project in graphic form. Inconsistencies in scheduling and priority considerations are promptly highlighted, raising all sorts of fundamental questions regarding locational and developmental criteria and relationship to program direction which the capital program examiners are forced to answer. Very soon the traditional questions regarding materials and design will give way to those more significant matters . . ."[1]

Donald W. Hill, Assistant to the General Superintendent - Budget, Board of Education, City of Chicago, Illinois, indicates the steps taken by the Chicago City School System:

> . . . I think a distinction between <u>program budgeting</u> and <u>performance budgeting</u> may be necessary, particularly as the terms are applied to budgeting for public schools.

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[1] George A. Shipman, 'Developments in Public Administration,' Public Administration Review, December, 1966, pp. 353-54.

Performance budgeting may be appropriate for certain activities performed by the schools; particularly in the functional areas of operation of plant, maintenance of plant, capital outlay, and lunchroom services. The division of programs into activities, subactivities, work units, and finally costs is too great a refinement in view of what is presently known about the nature of teaching and learning. . . . Definition in terms of the various disciplines within the curriculum, such as English, mathematics, and biology, would appear to be a more logical division.

Over the past four years in Chicago, Dr. Benjamin C. Willis, General Superintendent of Schools, has attempted to revise the budget and accounting structure to make it more meaningful and useful as an aid to management and policy formulation. Within the broad functions of administration, instruction, and the like, a complete reclassification of accounts has been developed with the major stress on programs rather than on the traditional objects of expenditure. For example, English, mathematics, biology, and chemistry are designated as programs under the function of instruction. The measurement of unit cost for each program within the area of instruction uses class membership or number of pupils served.

We are fully aware that a unit of measurement based on membership only fails to take into account the individual or collective abilities of the pupils or the specific educational objectives which we intend to accomplish. Much research in this area is now under way in an attempt to relate expenditures to expected outcomes in more specific terms. . . .

Under the function of maintenance of plant, performance type activities, . . . have been developed.

. . . Central office programs are defined in terms of process, project, or purpose . . .

Each school has an operating budget which indicates personnel and non-personnel appropriations within each program. Appropriations for staff, material, and services are based on various staffing and rate schedules. Calculations on the basis of these schedules are developed by an IBM 7074 computer. . . . We look upon the objects /of expenditure/ in terms of a "product mix" in order to accomplish a given objective, the planned program. . . .

The budget accounts have generally been arranged in such a way as to facilitate the formulation and execution of policy and assessment of results.[1]

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[1] Donald W. Hill, "Progress Report on Program Budgeting in Chicago," Trends in Financing Public Education (Washington: National Education Association, 1965), pp. 191-92.

Curriculum Organization. [illegible] [illegible] [illegible] [illegible] by the [illegible] [illegible] of pupils, [illegible] [illegible] [illegible] [illegible]. The division of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] . . . [illegible] such as English, mathematics, and [illegible] [illegible] be a more logical division.

Over the past four years in Chicago, Dr. Benjamin C. Willis (General Superintendent of Schools), has [illegible] [illegible] budget and accounting structure [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible].

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] taxes. . . .

Under the [illegible] [illegible] [illegible] [illegible] [illegible] . . . [illegible]

. . . [illegible] [illegible] [illegible] [illegible] pupils, in purpose. . . .

Each school [illegible].

The budget [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] ness of courses.[1]

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[1] Donald [illegible] 1961. "[illegible] [illegible] [illegible] Program Budgeting in Chicago," Trends in [illegible] [illegible] [illegible] (Washington: National Education Association, [illegible]), pp. [illegible].

In his report on programmed budgeting in Memphis, Tennessee, Superintendent E. C. Stimbert stated the following:

> Six years ago we predicted that our budget for the 1965-66 fiscal year would be $38,500,000; our proposed budget for the coming year is $38,700,000. In the prophetic fraternity this is significant. . . . Our financial coding structure is designed around functions or purposes to be achieved by the expenditure of money and objects or what the money buys in the effort to achieve these purposes. As an example of our function and object coding, how would we classify teaching biology? It would be coded Function 2681 and Object 112. The major function 2 means it is instruction. The sub-function 6 . . . senior high. The activity 8 . . . science. The subactivity 1 means biology. The major object 1 . . . service of a certified employee was purchased. The detail object 12 . . . a teacher's services were bought.
>
> Some major functions are instruction, administration, guidance, and operation of plant. Some major object groupings are certified salaries, classified salaries, food, supplies, and land and buildings. So the very coding of our budgeting and expense accounting during the year is functional or performance program budgeting, even though we do not itemize purposes as we present our formal budget.[1]

A program approach based on activities requires an aggregation of all appropriate costs for that activity, a comparison of such cost over time, and some effort to isolate particular traits or establish trends that give an indication of the volume or quality of the output.

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[1] E. C. Stimbert, "Progress Report on Programmed Budgeting in Memphis," Trends in Financing Public Education (Washington: National Education Association, 1965), pp. 194-95.

CHAPTER V

SUMMARY AND CONCLUSIONS

This study has attempted to show how the concept of PPB as used in the Department of Defense may be utilized as a tool in improving the planning, budgeting, and controlling procedures of the Fairfax County School System. It has evaluated the procedures of a PPB application in the school system by discussing three basic research questions. The first question was: Can a Planning, Programming, and Budgeting system provide an objective measurement of the educational process in Fairfax County schools?

The adoption of PPB by Fairfax County as a method of administering its school system will provide the means for making better objective measurements of the educational function. Burkhead justifies this premise:

> /_An_/ objective that can be served by a program and performance approach is increased attention to long-range fiscal planning and projection. Most school districts would appear to be considerably more sophisticated in their planning for operating programs. Both are important and there are some evident interrelationships between the two. A program approach to school budgeting, together with conventional estimates of enrollment, will serve up the data necessary for such planning and projection.
>
> Innovation is never easy, and the application of program and performance concepts to school budgeting is not easy. A program and performance approach will require school administrators to examine educational objectives in relation to the resources devoted to them. This approach does not necessitate an administrative reorganization.

> It does not require a new accounting system. It can be applied piecemeal and need not be systemwide at the outset. Program and performance budgeting does require a systematic study of relationships between costs and benefits. This is perhaps its only virtue, but this is sufficient justification.[1]

In a paper prepared for the Ninth Annual Conference on School Finance, April 3-5, 1966, at Chicago, Illinois, Dr. Selma J. Mushkin, Project Director of the Council of State Governments, Washington, D. C., stated:

> The State and Local Finances Project, partially with Ford Foundation support, is undertaking a pilot study of the development of planning-programming-budgeting systems for states and localities as a follow-up and extension of Project '70. The pilot study will be carried out on an experimental basis in five states, as many countries, and several cities.
>
> Project '70 was undertaken more than two years ago as a multi-purpose research exercise:
>
> 1. To determine the likely future impact of state and local government on national economy.
> 2. To measure the impact of national policy directions on the expenditure programs of the states.
> 3. To experiment with a new measure of fiscal capacity, a measure that would help answer the question, what are the differences in the capability of the states to meet their expenditure requirements? /One of the conclusions drawn from the Project '70 models was that/
>
> A pricing of "needs" for public services and facilities could result in a higher expenditure total and a different pattern of expenditure among functions and regions. A clearer identification of program goals that is implicit in program budgeting would facilitate such measurement of the price of public services on a needs basis.[2]

The second question was: Can a PPB system, on the order of that implemented by the Department of Defense, provide a conceptual scheme of

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[1] Burkhead, op. cit., p. 190.

[2] Selma J. Mushkin, "The Outlook for State and Local Governments," Partnership in School Finance (Washington: National Education Association, 1966), pp. 23-25.

planning and control that can satisfy the school system's present and future requirements? Chapter IV has proposed a conceptual framework of PPB, based on the system implemented by DOD, and discussed the scheme for planning, management control, operational control, and the methods of application. This scheme will satisfy the Fairfax County School System's present and future requirements. This is borne out by the following analysis of PPB made by Dr. Mushkin:

> The planning-programming-budgeting system may be viewed as a tool that provides the policy maker with a systematic analysis of expected benefits and costs of alternative courses of action to reach a given policy objective or goal. It is also a tool for budgeting, which places annual or biennial budgets in the context of a long-range, phased governmental program.
>
> The major components of a planning-programming-budgeting system are:
>
> 1. An output-oriented program structure that reflects, for each major mission of an agency, the program categories with supporting elements.
> 2. A program structure that clarifies specific goals, which are expressed in quantitative and measurable terms.
> 3. Identification and continual analysis of the utility and costs of alternative time-phased programs as they relate to stated goals and objectives in order to assure a balanced use of available resources.
> 4. The preparation of multi-year programs and financial plans, with supporting analysis, to aid in the preparation of subsequent years' impact.
> 5. The establishment of a cycle that allows updating of program and financial plans as required during the current year, and revisions for the subsequent budget year.[1]

The third and most important question was: If labor and materials are the resource inputs into the overall educational system, what are the resultant outputs?

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[1] Ibid., p. 23.

The tangible outputs resulting from the use of PPB are the measurable costs of intermediate services and direct programs of the educational system stated in terms of the inputs over a specific period of time. As shown in Chapter IV, use of PPB in the Fairfax County School System would provide an effective means of relating final program costs to the planned budget. This has been done by outlining some of the areas of school operation where a program approach supported by detailed performance data is feasible. These areas include food services, attendance services, business office functions of accounting and purchasing, and library services.

The intangible output of a system using PPB concepts is the attainment by children of their full potential in developing technical skills, increasing their appreciation of liberal arts, and cultivating a sensitivity to human needs and relationships. These outputs are the qualities desirable in the framework of a democratic society.

Because the concept of PPB is foreign to school systems within the State of Virginia, the budget structure aligned by programs and functions may subject the Fairfax County School System to criticism from state school authorities and county officials.

Aaron Wildavsky, Professor and Chairman of the Department of Political Science, University of California (Berkeley), pictures the utilization of PPB in this manner:

> The basic idea behind program budgeting is that instead of presenting budgetary requests in the usual line item form, which focuses

> on categories like supplies, personnel, and maintenance, the presentation is made in terms of the end products, of program packages like public health or limited war of strategic retaliatory forces.[1]

In the final analysis, the hard decision faced by proponents of a PPB system is prefaced by the question "How much money will PPB save?" No suggestion has been made that the principal purpose for adopting the concept of a planning, programming, and budgeting scheme into the school system is cost reduction. This concept is designed to improve efficiency and promote effectiveness to the extent that objectives are attained more economically. The same monetary allocation will finance broader educational programs while systematic planning will recognize new and important facets for consideration. PPB is a useful management tool which may be applied at any administrative level in the Fairfax County School System where responsibility and authority for complex decisions and controls are vested.

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[1] Aaron Wildavsky, "The Political Economy of Efficiency: Cost-Benefit Analysis, Systems Analysis, and Program Budgeting," Public Administration Review, XXVI, No. 4 (December, 1966), 302.

> [illegible][1]

In the final analysis, [illegible] types of a planning, programming, and budgeting system [illegible] PPB is a useful management tool which may be applied [illegible]

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[1] Aaron Wildavsky, "The Political Economy of Efficiency: Cost-Benefit Analysis, Systems Analysis, and Program Budgeting," *Public Administration Review*, [illegible]

BIBLIOGRAPHY

Public Documents

Behnk, William E. Educational Data Processing. Albany: The University of the State of New York, The State Education Department, 1963.

County of Fairfax, Virginia. 1966 Annual Report - Year Ended June 30, 1966. Fairfax: Fairfax County Division of Information, June, 1966.

__________. A Plan for Orderly Growth, Fairfax County, 1968-72. December, 1966.

Fairfax County School Board. Information for Citizens and Voters of Fairfax County. March, 1965.

__________. Kindergarten 1968 - Bulletin. Fairfax: The Administration, October 19, 1966.

__________. Quarterly Budget Review for Quarter Ending December 31, 1966. Fairfax, December 31, 1966.

__________. Superintendent's School Budget for 1966-67, January 14, 1966.

__________. Superintendent's Proposed School Budget for 1967-68, January 12, 1967.

Fairfax County Superintendent of Schools. Letter to the Board of Education in Support of the School Budget Proposed for 1967-68. Fairfax: Office of the Superintendent of Schools, January 12, 1967.

U.S. Bureau of the Budget, Executive Office of the President. The Bureau of the Budget - What It Is - What It Does. June, 1966.

U.S. Department of Defense. A Primer on Project PRIME. November, 1966.

U.S. Department of the Navy. Financial Management in the Navy. Washington: Bureau of Naval Personnel, 1962.

__________. Financial Management in the Navy. Washington: Naval Air Facility, Navy Logistics Systems School, 1966.

Virginia State Board of Education. Structure of Public Education in Virginia. Richmond: State Board of Education, 1964.

Books

Albers, Henry H. Organized Executive Action. New York: John Wiley & Sons, Inc., 1962.

Anthony, Robert N. Planning and Control Systems: A Framework for Analysis. Boston: Harvard University Press, 1965.

Anthony, Robert N., Deardon, John, and Vancil, Richard F. Management Control Systems. Homewood, Ill.: Richard D. Irwin, Inc., 1965.

Bittel, Lester R. Management by Exception. New York: McGraw-Hill Book Co., Inc., 1964.

Burkhead, Jesse. Governmental Budgeting. New York: John Wiley & Sons, Inc., 1956.

__________. Public School Finance--Economics and Politics. Syracuse: Syracuse University Press, 1964.

__________. "The Theory and Application of Program Budgeting to Education," Trends in Financing Public Education. Washington: National Education Association, 1965.

Colm, Gerhard, and Wagner, Peter. Federal Budget Projections. Washington: The Brookings Institution, 1966.

Corey, Arthur F. "The Essentials of a Modern School Finance Program," Partnership in School Finance. Washington: National Education Association, 1966.

Dauten, Paul M., Jr. (ed.). "Emerging Concepts of Managerial Control," Current Issues and Emerging Concepts in Management. Boston: Houghton Mifflin Company, 1962.

Duncombe, Herbert Sydney. County Government in America. Washington: National Association of Counties, 1966.

Emmerich, Herbert. A Handbook of Public Administration. New York: The United Nations, 1961.

Funderburk, Earl C. "The Local-State-Federal Partnership in School Finance as Viewed by a Local Administrator," Partnership in School Finance. Washington: National Education Association, 1966.

Gross, Bertram M. The Managing of Organizations. 2 vols. New York: The Free Press of Glencoe, 1964.

Hammon, Paul E. "Budgets and Cost Control," Systems and Procedures--A Handbook for Business and Industry. Edited by Victor Lazzaro. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1959.

Heller, Walter W. "The Economic and Fiscal Outlook," Trends in Financing Public Education. Washington: National Education Association, 1965.

Hill, Donald W. "Progress Report on Program Budgeting in Chicago," Trends in Financing Public Education. Washington: National Education Association, 1965.

Hitch, Charles J., and McKean, Roland N. The Economics of Defense in the Nuclear Age. Cambridge: Harvard University Press, 1960.

Koontz, Harold. "A Preliminary Statement of Principles of Planning and Control," Current Issues and Emerging Concepts in Management. Edited by Paul M. Dauten, Jr. Boston: Houghton Mifflin Co., 1962.

McLure, William P. "Role of the Federal Government in School Finance Research," Partnership in School Finance. Washington: National Education Association, 1966.

Merrill, E. C. "School District Reorganization: Implications for Financial Support," Trends in Financing Public Education. Washington: National Education Association, 1965.

Mushkin, Selma J. "The Outlook for State and Local Governments," Partnership in School Finance. Washington: National Education Association, 1966.

Novick, David. Program Budgeting: Program Analysis and the Federal Budget. Washington: The RAND Corporation, 1965.

Ott, David J., and Ott, Attiat F. Federal Budget Policy. Washington: The Brookings Institution, 1965.

Rummel, J. Francis, and Ballaine, Wesley C. Research Methodology in Business. Evanston: Harper and Row, Publishers, 1963.

Samuelson, Everett V., Tankard, George G., Jr., and Pope, Hoyt W. Financial Accounting for School Activities. Washington: Office of Education, U.S. Department of Health, Education, and Welfare, 1962.

Smithies, Arthur. The Budgetary Process in the United States. New York: McGraw-Hill Book Co., Inc., 1955.

__________. "The Conceptual Framework for the Program Budget," Program Budgeting. Edited by David Novick. Santa Monico: The RAND Corporation, 1965.

Stimbert, E.C. "Progress Report on Programmed Budgeting in Memphis," Trends in Financing Public Education. Washington: National Education Association, 1965.

Wildavsky, Aaron. The Politics of the Budgeting Process. Boston and Toronto: Little, Brown and Co., 1964.

Articles and Periodicals

Egerton, John. "Profile of a School System," Southern Education Report, November, 1966, pp. 26-33.

Greenhouse, Samuel M. "The Planning-Programming-Budgeting System: Rationale, Language, and Idea-Relationships," Public Administration Review, XXVI, No. 4 (December, 1966), 271-277.

Harrill, E. Reece. "Planning-Programming-Budgeting in Government," Budgeting, XV, No. 1 (July-August, 1966), 18-22.

Hirsch, Werner Z. "Toward Federal Program Budgeting," Public Administration Review, XXVI, No. 4 (December, 1966), 259-269.

Schick, Allen. "The Road to PPB: The Stages of Budget Reform," Public Administration Review, XXVI, No. 4 (December, 1966), 243-258.

Shipman, George A. "PPBS in New York State," Public Administration Review, XXVI, No. 3 (September, 1966), 230-231.

Lyden, F. J., and Miller, Ernest G. Planning-Programming-Budgeting. Chicago: Markham Publishing Co., 1967.

[illegible], [illegible], [illegible], and [illegible]. [illegible]. Washington: Office of Education, U.S. Department of Health, Education, and Welfare, 196[illegible].

Smithies, Arthur. The Budgetary Process in the United States. New York: McGraw-Hill Book Co., Inc., 1955.

________. "The Conceptual Framework for the Program Budget," Program Budgeting. Edited by David Novick. Santa Monica: The RAND Corporation, 1964.

[illegible], R. C. "Progress Report on Programmed Budgeting in [illegible]," Trends in Financing Public Education. Washington: National Education Association, 1965.

Wildavsky, Aaron. The Politics of the Budgetary Process. Boston and Toronto: Little, Brown and Co., 1964.

Articles and Periodicals

Egerton, John. "Profile of a School System," Southern Education Report, (November, 1966), pp. 10-15.

Greenhouse, Samuel M. "The Planning-Programming-Budgeting System: Rationale, Language, and Idea-Relationships," Public Administration Review, XXVI, No. 4 (December, 1966), 271-277.

[illegible], [illegible]. "Planning-Programming-Budgeting [illegible]," [illegible], [illegible] (June-August, 1966), 14-20.

Hirsch, Werner Z. "Toward Federal Program Budgeting," Public Administration Review, XXVI, No. 4 (December, 1966), 259-269.

Schick, Allen. "The Road to PPB: The Stages of Budget Reform," Public Administration Review, XXVI, No. 4 (December, 1966), 243-258.

[illegible], George A. "[illegible]," Public Administration Review, XXVI, No. 3 (September, 1966), [illegible].

Shipman, George A. "PPBS in New York State: A Further Note," Public Administration Review, XXVI, No. 4 (December, 1966), 353-354.

Wildavsky, Aaron. "The Political Economy of Efficiency: Cost-Benefit Analysis, Systems Analysis, and Program Budgeting," Public Administration Review, XXVI, No. 4 (December, 1966), 292-310.

Reports

Chief of Naval Operations. Resource Management Study. Report of CNO Resource Management Study to the Chief of Naval Operations. Washington: The CNO Working Study Group, 1966.

Committee for Economic Development. Budgeting for National Objectives. A Statement on National Policy by the Research and Policy Committee. New York: Committee for Economic Development, 1966.

Speeches

Anderson, Herbert, Captain, USN, Office of the Chief of Naval Operations (Code OP 90B). Before the Navy Financial Management students, The George Washington University, November 30, 1966.

Rowen, Henry S, U.S. Bureau of the Budget, Assistant Director. Before a Summer Seminar on Systems Analysis and Program Evaluation, BOB, August 20, 1965.

Interviews

Godla, Louis, Director, Vocational Education, Fairfax County School Board. October 15, 1866, and March 3, 1967.

Harrison, Kenneth, Budget Director, Fairfax County School Finance Office. February 28 and March 8, 1967.

Holliday, Albert E., Director of School/Community Relations, Fairfax County School Board. March 8, 1967.

Jones, Howard R., Chief Accountant - Federal Programs, Fairfax County School Finance Office, February 28, 1967, and March 2, 1967.

Morris, Dr. Barry, Assistant Superintendent for Finance, Fairfax County School Board Offices. February 28, 1967.

Schick, Allen. "The Road to PPB: The Stages of Budget Reform," Public Administration Review, XXVI, No. 4 (December, 1966), 243-258.

Wildavsky, Aaron. "The Political Economy of Efficiency: Cost-Benefit Analysis, Systems Analysis, and Program Budgeting," Public Administration Review, XXVI, No. 4 (December, 1966), 292-310.

REPORTS

Chief of Naval Operations. Resource Management Study. Report of CNO Resource Management Study Group in the Office of the Chief of Naval Operations. Washington: The CNO Planning Study Group, 1966.

Committee for Economic Development. Budgeting for National Objectives: A Statement on National Policy by the Research and Policy Committee. New York: Committee for Economic Development, 1966.

SPEECHES

Anderson, Herbert, Captain, USN. Office of the Chief of Naval Operations (Code OP 90B). Talk to the Navy Planning Programming Budgeting Students, The George Washington University, November 29, 1966.

Kasten, Harry L. U.S. Bureau of the Budget, Training Director. Before a Seminar on Systems Analysis and Program Evaluation, ACE, August 25, 1966.

INTERVIEWS

Davis, Lewis, Director, Financial Services, Fairfax County School Board. February 15, 1966 and March 8, 1967.

Hartzell, Randolph, Budget Director, Fairfax County School Board Office, February 23 and March 8, 1967.

Holliday, Albert E., Director of School-Community Relations, Fairfax County School Board, March 7, 1967.

Jones, Howard L., Chief Accountant, Federal Programs, Fairfax County School Finance Office, February 24, 1967, and March 1, 1967.

Morris, Dr. Harry, Assistant Superintendent for Finance, Fairfax County School Board Office, February 28, 1967.

Spirt, David, Planning Analyst, Office of the Associate Superintendent of Schools, Fairfax County School Board. March 2-8, 1967.

Tankard, George G., Jr., Coordinator of Federal Programs, Fairfax County School Board. March 8, 1967.

Watts, Peter, Supervisor for Capital and Auxiliary Funds, Fairfax County School Finance Office. February 28, and March 2, 1967.

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